

# MICHIGAN FARMER.

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WARREN ISHAM, EDITOR.

NO. 1, NEW SERIES.

## EDITORIAL CORRESPONDENCE.

BEYROOT, (Syria,) May 15th, 1852.

Friend BETTS:

It is now nearly three months since I wrote you, having been, most of the time, entirely aside from all possibility of communicating with you, or with the civilized world.

On the eve of my departure from Cairo, I wrote you, that I had accomplished my trip up the Nile to Ethiopia, and expected to be forty days in traversing the long desert, by way of the Red Sea, Sinai, and Petra, to Palestine. That tour I accomplished in safety, reaching Jerusalem on the first day of April, where I staid about a month, making excursions, meanwhile, into all the interesting parts of Judea.

On the 27th of April, I left Jerusalem, in company with Prof. Hackett, of the Newton Theological Seminary, (near Boston,) and after sixteen days zigzag travel, which brought us through all the most interesting localities in the Holy Land, (except what I had before seen,) we arrived in this place.

In this rout I met with some misfortunes, having had a fine donkey, which I had purchased for my own special riding, stolen from me by the Arabs at the sea of Galilee, or Tiberias. Many other things I had stolen also, but I did not feel their loss, so sensibly. The loss, however, was not more than twenty-five or thirty dollars, but it was a great inconvenience.

The fatigues of the journey have been excessive. I have several times been on the point of sinking under them, but a merciful Providence has brought me thus far on my way. On arriving here, I found myself so exhausted, from the effects of a bowel complaint, that I was necessitated to leave Prof. H. with whom I had expected to proceed to Damascus, Baalbec, and the heights of Lebanon. But I am in hopes to be well enough in a day or two to perform that interesting tour. I shall have to go alone, and there is some danger, as the Druses are in a state of insurrection, which has interrupted travel of late. I say alone—I mean with my Arabs, which is about the same thing. The trip will only occupy eight or ten days, and then I shall set my face for home, by way of Smyrna, Constantinople, Athens, the Grecian Isles, the Adriatic, Trieste, Dresden, Berlin, Hamburg, the Baltic, &c., &c., making no unnecessary delay.

Indeed, I have not stopped to play by the way anywhere, but have been constantly pressing on with as much haste as was compatible with the objects to be accomplished, and with my physical strength, riding all day beneath a burning sun, and then writing half the night. My portfolio is about as full of letters as it can hold, as I have had no opportunity of sending any for a long time, and shall not for some time to come, though I think I shall send a batch as soon as I get upon the great thoroughfares of Europe.

My long absence has in no degree weaned me from my beloved country, but the reverse. O that all the people of my native land, could go where I have been, and see what I have seen—sure I am, that they would learn to appreciate the institutions under which they live, as they never did before. Favored, happy country! How do I yearn to set foot upon thy shores!

To the readers of the Farmer, I would say, that I look forward with no little interest to the time when I shall be permitted to resume my labors in that interesting field; and I trust I shall be prepared to take hold and prosecute the great object with renewed efficiency. I doubt not, however, that they are well and faithfully served in my absence.

When I shall be at home, I cannot tell; but, I shall hasten my steps with all the speed I can command.

Respectfully,

WARREN ISHAM.

## MANURES.

### THE FARMER'S "SHEET ANCHOR."

The basis of all productive and profitable farming, is *manures*. Ordinarily, no farmer can become rich, who does not husband with scrupulous care and return to the soil, all those substances abstracted from it in the ultimate form of grain, hay, straw, roots, milk and fruit. He may obtain a comfortable living—yes, he may acquire an abundance, as some have on our rich prairies and alluvial soils, without ever applying a single cart-load of manure; but as sure as law is the order of creation, he will be rebuked, at no distant day, for such reckless conduct. One need not go out of this State, to find farms, once a garden, now so denuded of the essential elements of crops, that the average produce is not half what it was a few years ago.

The cause is obvious enough, on a moment's reflection. Our grain, cattle and pork, have been exported; the constituents of these have been drawn from the soil, mostly, and nothing has been returned to supply the loss; and this has been repeated year after year; each taking away portions of the enriching substances of our fields, and we have scarcely thought that this continual drain would ever amount to any thing serious. Let us see: In every 100 lbs. of wheat, there is 2 lbs. of ash or mineral matter, which has been derived from the soil. A crop of 25 bushels to the acre, would give 1500 lbs., which would yield 30 lbs. of ash. In the straw of this crop, there is removed from an acre of soil 128 lbs. of mineral matter, making in all 158 lbs. of substances taken directly from the soil. From a field of 20 acres, there would be removed, in a single crop, at this rate, 3,160 lbs., and this consisting of the very elements, for the most part, which constitute the fertility of all soils. Hence, wheat is an exhausting crop, and the experience of many of our farmers abundantly proves it. Ten such crops taken from a field of 20 acres, would thus abstract therefrom nearly 16 tons of those elements which make a fertile soil. It therefore ceases to be enigmatical, that lands under our grain-growing system of farming, though once fertile, should fail to yield remunerating crops after a few years' cultivation.—

The same result, it might be shown, would ensue on the constant cropping of a soil with any other crops, where nothing is returned, one crop drawing one kind of food, and another a different kind, until it is completely worn out.

There can be no doubt then, of the importance of restoring to our fields those substances which we are annually carrying away in these forms. For this purpose, *Barn-yard manure* must be our main dependence. The modes of saving and preserving this, we shall make the subject of the present article.

*Barn-yard Manure*, consists of the droppings of cattle, horses, sheep and swine, and the materials used for litter, which is generally straw. To this may be added the dung of fowls, which if properly managed is worth as much, pound for pound as the best guano.

The value of yard manure depends upon two conditions; 1st the manner in which it is made and preserved, and 2d, the state in which it is applied to the soil. And if there are any two subjects which the farmer should turn and turn and turn in his mind, and study and investigate more than any thing else, these are they.

It should be continually borne in mind, that the most valuable portions of the manure of the barn-yard consist of gases that are at all times liable to escape into the atmosphere, and salts which are washed away by every rain. So that after it has laid exposed in the yard half a year, a large part of its enriching qualities are gone. No farmer is able to, nor would he in any other way, endure this yearly loss.

To preserve these important constituents, it is customary in the best agricultural districts, to prepare cellars under the stables for the reception of the manure; trap-doors being made, through which it is shoveled, and then distributed evenly about. These cellars are made water-tight by a wall of plank, brick or stone. A layer of muck two feet thick is placed upon the bottom of the cellar, before any manure is thrown in, for the purpose of absorbing the liquid portion. When the manure has accumulated to the thickness of six or eight inches, another layer of muck, or swamp earth, or leaves is added, and so on until the cellar is filled, making the proportions about one of manure and two of muck. Manure made here is of the most powerful character. All the volatile gases are preserved, and no rains have reached it to wash away the rich, soluble salts. R. Chaffin, one of the competitors for a premium on farms, offered by the Middlesex, (Mass.) Agricultural Society, says, "I consider one load of manure composted in the cellar under my barn, worth three which have been exposed to frost, rain, sun-shine and evaporation." His cellar is made so as to exclude frost and rain. His cows are stabled nights, all the year, and he manure goes into the cellar, where hogs are kept to eat over the different materials and form them into a compost.

The following analysis shows the superior value of sheltered manure over that exposed in yards.

	SHELTERED MANURE.	YARD MANURE.
Water,	71,04	71,00
Nitrogenised matter, yielding ammonia, 100 parts dried,	2,37	1,07
Salt soluble in water, containing organic and inorganic matter,	10,07	4,06
Organic matter,	5,42	1,82

Inorganic "	4,28	2,78
Phosphoric acid,	0,03	0,26
Alkalies—Potash and Soda,	2,00	0,08

We estimate the value of manures by the quantity of ammonia which they are capable of yielding, by the amount of organic matter they contain, whereby they furnish carbon to plants, and by the soluble salts, or in other words, the potash, soda, lime, magnesia, alumina, silica, sulphuric and phosphoric acids, they contain in a state capable of being taken up by the roots of plants.—

It may be seen by the above analysis that all these substances exist in more than double the quantity in the sheltered manure, that is found in that from the open yard. A stronger argument in favor of sheltering manure could not be made. Here is one advantage of science to Agriculture, it tells the whole story at a glance, and the expense of testing the value of these manures, by tedious experiments is thus entirely avoided. The waste of organic matter,  $3\frac{1}{2}$  per cent, is very great, and it must strike those who have sandy farms, destitute of organic matter and who are in the habit of leaving their manure, exposed whole years in the open sun, as a point of no trivial consequence. It is very easy to see how this organic matter is wasted. Who has not observed the large straw-piles about the country, dwindle down to almost nothing? It is combustion—the same result is produced as though the straw had been burned, tho' in the former case it requires years to accomplish it.

But the most important loss is the inorganic portion, which must be derived from the soil. Taking the potash and soda into the account, and allowing for the organic matter in solution as given above, we have a loss of at least seven-tenths, or over two thirds of the whole; a waste which would pay a good interest yearly on the sum invested in a faam—a total, needless loss.

But says one, "we cannot all have barn cellars, we cannot afford it. If we can but get good barns, we consider ourselves well off."

True: and for this and some other objections, such as the difficulty, (except in favorable situations) of getting the manure out, the disagreeableness of spreading it about in the cellar, and the destructive effects of fumes (gases) which rise from the manure, upon the lower timbers of the building, unless the cellar is thoroughly ventilated,—for these reasons and also that manure can be preserved in other ways without the loss of its valuable qualities, at as little or less expense, we think cellars will not soon come into general use. Where barns are erected on a side-hill, and the most of the farm lies below, so that there need not be much carting up hill, a cellar might be easily and cheaply constructed, and perhaps would be the most economical and convenient arrangement that could be adopted. The door at which the manure would be taken out, being on a level with the ground outside, there would be no trouble about backing a wagon or cart in to get the manure.

We next come to speak of sheds as shelters for manure. These may be constructed in a cheap manner by placing posts in the ground and poles on the tops of these, as hundreds of them are made for cattle all over the country, and covered with straw, where it is not convenient to obtain other materials. The sides should be boarded. In this rude, cheap structure, manure may be preserved for years, with proper care, and possess all the enriching

qualities of that of the cellar. But it is with manure sheds as with every thing else about a farm, if they are worth erecting, they are worth being built of substantial materials, and in a comely form, and as they would be quite low, the expense would not be great. They should adjoin the stables, that the manure might be easily wheeled into them with barrows; and a platform will need to be erected on each side, resting upon arms morticed into the posts, upon which to wheel the contents of the stables, and distribute them from end to end of the building. No water should ever enter this building, except in the form of urine, unless it should be found necessary sometimes to reduce the temperature of the manure by applying water. If the soil is dry within the shed, it should be shoveled up and mixed with the manure from the stables. With the addition of a coat of ashes occasionally, this makes a powerful manure. In this shed is to be deposited all the rough materials which may be found about the farm, such as refuse straw and corn stalks not used for bedding, weeds, potato tops, turf or sods, leaves whenever they can be gathered, and every thing which can be converted into the food of plants, should be carefully husbanded, to add to the produce of the farm. Proper attention to this is the very starting post in good farming, and will enable a farmer to nearly double the average quantity of his crops per acre, with the same amount of labor as before given.

**Liquid Manures.**—This part consisting mostly of the urine of cattle and horses, is, by farmers generally allowed to run to waste, being considered of but little account. In Flanders, where are found the best farmers in the world, the urine of a cow is considered worth \$10 a year, so highly is it esteemed. It is found that there is voided by a cow in a year 13000 lbs. of urine, of which, 900 lbs. is solid matter, 400 urea, a substance yielding a large quantity of ammonia, and 230 ammonia, (*Johnston.*) "The urine of the cow has been analysed in several States by Sprengel, with the following results in 1000 parts:

Water,	926.2	Urea,	40.0
Hippuric and lactic acid,	6.1	Mucus,	2.00
Carbonic acid,	2.1	Ammonia,	2.1
Potash,	6.6	Soda,	5.5
Sulphuric acid,	4.0	Phosphoric acid,	0.7
Chlorine,	2.7	Lime,	0.6
Magnesia,	0.4	Silica,	0.4
Alumina, oxide of iron and oxide of manganese,			0.1

Here then, every farmer who keeps a cow, or an ox, can have a manure equal in value to the best of the much lauded guano, if he will only take the proper steps to preserve it from waste; and estimated at the value of guano, would be worth, if the whole could be saved, \$20 a year.

It is not expected, nor indeed do we know that it is desirable to attempt to make our practice conform strictly to the prepared tables of chemists; but we are enabled by the aid of these, to see, in a manner by which we cannot be deceived, the great value and importance of these materials, which, through a heedless indifference wholly inexcusable, we allow every day to go to waste before our eyes, and we at the same time mourning over light crops, the want of implements and fixtures upon our farms, &c., which by saving and applying these materials, the increased products of the farm would supply.

Human urine is still more valuable and rich in grain-forming substances, yet it is all lost—not one farmer in a thousand ever thinks of saving it. Privies should be so

constructed that it might all be preserved, which could be very easily done. We have a plan in contemplation which we intend to adopt unless a better one is presented. Prepare a tank immediately in rear of the privy, about the dimensions of a common two horse wagon box or larger if desirable. Place an apron way, or inclined plane beneath the box or seat, extending into the tank, and upon this each week pour the suds from the wash which can be done by some convenient arrangement either by spouts or by having the cover of the seat put on with hinges; by which the building will be completely cleansed, and an important addition made to the manure in the tank. A good supply of some absorbing substance should be kept constantly on hand, and a portion added as often as necessary to soak up the liquid portion and prevent the solid from drying. In this way in the run of a year 12 or 15 loads of the richest manure could be made. But to return:

It being very evident that the urine of animals is quite as valuable as the solid excrements, the next step is to preserve it from waste. Something must be used to take it up and hold it in suspension. For this purpose, the black mold from elm and black ash swamps and the muck from marshes must be our main dependence. In truth, we need desire nothing better. The former is fit for use as soon as obtained, but the latter needs to be dug and exposed a year, to the action of air and frost to fit it completely for use. Those muck beds which are formed by deposits from the annual overflow of rivers, are generally fit for use after an exposure of a month or two. But it would be better to use fresh muck even for the absorption of liquid manures, than to allow them to run off and waste. There is however, ordinarily no necessity for this. Muck may be decomposed in four to six weeks by a very simple process. Take three bushels of quick lime, fresh from the kiln, and one bushel of salt, or in this proportion. Dissolve the salt in water and slake the lime with it. Mix thoroughly, turning it every other day for ten days. Then draw up your muck and deposit a layer upon the ground, and give a good sprinkling of the lime; then another layer of muck, and another sprinkling of lime and so on. A powerful decomposition will soon ensue. After three or four weeks it may need to be shoveled over, when you will have a fine, black pulverulent mass, which will not only absorb the liquid portions of the manure, but will, itself be the source of some of the most important food of plants. Care must be observed not to use more water than is necessary to dissolve the salt, as the lime will not take up a larger quantity. In case too much water is applied, more lime should be added until it is brought into a state fit for use. It should be turned over as before stated, every other day for ten days, and then mixed with the muck at the rate of four bushels to the cord. This plan is given by Prof. C. W. Johnson, and it is found to be the most economical and profitable mode of preparing cold, organic matters, for application to soils.

But says one, "that requires a great deal of labor and trouble, and I have some doubts about its all paying."—Yes, reader, it requires labor and like every thing else that is desirable, or worth possessing in this world, cannot be accomplished without care and trouble. Farmers general-

(Continued on Page 198—this No.)

For the Michigan Farmer  
**FARMERS, WHY DON'T YOU WRITE?**  
 CANAAN, Kent Co., April 3, 1852.

MR. EDITOR,—

In perusing a late number of the Michigan Farmer, I regret to find a great falling off in the number of its correspondents, compared with a year ago. This should not be the case. It is this interchange of ideas and experiments in agriculture and horticulture, that is calculated to raise the standard of our farming classes and plant it on a permanent basis. It is that which makes our agricultural journals interesting and valuable. A few experiments of some of our most practical farmers in the best mode of raising wheat, corn and potatoes; the best ways of promoting and perfecting the growth and quality of fruit, and improvements in the value of our cattle, horses, sheep and hogs, are worth more to every farmer in Michigan, than twenty-five times the cost of the paper, for the reason that they are the results obtained from observation and investigation in our own climate and in our own soil.

I notice an inquiry on page eleven of the present volume of the Farmer, from "Wolverine," as to the best mode of destroying that pest of all gardens, the striped bug. Last season I tried a number of remedies without success, but at last I applied a solution of hen manure, which had the desired effect. It should be applied often; try it. It will not hurt the vines be assured.

I would inform N. J. Brown that the time for planting Broom Corn is the same as that for other corn, on a soil of rich, sandy loam. I think it best planted in drills, about three and a half feet apart, as the more can be obtained to the acre. It should not be broken down until the seed is fully ripe; then break two rows together, forming a table to cure it on when cut. The seed should be stripped off as soon as taken into the barn, as it is not so liable to mildew.

On opening a cow which I lost but a few days since, I found the contents of the stomach or manufolds dry and hard as though baked in an oven; can some of your readers inform me if this is what is called the dry murrain, (I always supposed that this disease affected the paunch instead of the stomach) and also give us a remedy.

M. B. HINE.

[A celebrated General once said, on the moment of a severe engagement, "It is expected that every man will do his duty!"

We hope that correspondents will not forget the Farmer, for an intelligent and full correspondence is worth more to the readers of an agricultural journal, than the writings of all the Editors in the Union.

Farmers are apt to think that because editors should know all about the matter, they do know it all.

Quite a mistake, surely, for often editors are nothing more than men with a goose quill in their caps. We are glad to have our friends write, for we are much in need of their valuable experience and instruction.]

For the Michigan Farmer.  
**CROPS IN JACKSON COUNTY.**

MR. EDITOR,—

Perhaps a little farming news, from up country, would suit you. Wheat, in our county, is generally light, having suffered from winter-killing, first, and then from cold and wet weather, and at present it looks thin; the heads are short, and it must be a light crop, unless we have the most favorable kind of weather until harvest. The weather, at present, is very hot and dry.

Corn, in this county, looks badly, having almost entirely failed to come up. Even where planted three times, it will not average two stalks in a hill. There are exceptions, however: those who followed in the footsteps of their New England forefathers, and braided up their seed corn early, and hung it up chamber, have fields that look fine. Old seed, that was kept over, looks equally as well!

Peaches, apples and cherries, bid fair to be plenty. Many of our finest young orchards are badly injured from winter-killing. But, perhaps I have said enough at present. I may say something at another time, why corn did not grow, &c.

With respect,

AARON REYNOLDS.

Spring Arbor, June 17, 1852.

For the Michigan Farmer.

#### CURE FOR RATTLE SNAKE BITE.

MR. EDITOR:

It may not be generally known that the bark of the Blue Ash is a remedy for rattle snake bite. You may confer a favor upon some one who may be unfortunate enough to fall within reach of those detestable "varmints," or have their horses or cattle bitten, by publishing the following experiment:

I had a colt bitten this spring, about a mile from home. I immediately set off in pursuit of the bark—I gathered about a peck of the *inside*, put it a steeping in hot water, and started for my colt. When I arrived at home with the beast, the head was so swollen that it was with difficulty it could breathe. I gave it two or three quarts of the tea, strong; I then pounded some of the bark fine, sewed a piece of cloth to fit close to the nose and loose above; this I filled with the pounded bark and kept it moist with the liquor. The next day, I mixed some bran and fed two or three times.—I continued the application two days; the third day, the swelling was gone, and the animal appeared as well as before bitten. The same process will answer equally as well for a person.

H. BETTS.

Burr Oak, 6th mo., 1852.

For the Michigan Farmer.

#### SEED CORN—SORREL—SHORT-CAKE PIE.

FRIEND BETTS:

By your leave, may I beg a small tax upon your Typum, whereby, peradventure, a word of profit may be extended to some of my brother farmers. It is not my intention to present mere theory, but practical facts, deduced by a serious wrestle with that model teacher—Experience.

Serious difficulty has attended our pathway the present season, to a crop of corn; not limited in extent, but universal. Far and wide, is sounded the failure in corn to germinate. The cause was first attributed to the cold, backward season; but recent disclosures have opened our eyes to facts whereby the observing may prevent in future time a similar disappointment. Seed corn should be hung up where it must dry thoroughly before freezing weather, which will be a sufficient guarantee that every kernel will grow. This fact was clearly demonstrated by an experiment which I was fortunate to make, although accidental, yet the result was truly gratifying, as by the means, I have now some corn growing, old fashion. In putting up seed corn, last fall, about half was strung up in the barn, as usual; the other, I carried to the house and suspended in the chamber. The only and sole object in this, was to escape the "varmints" that thronged the barn. In planting, this spring, I happened to plant separately, although in the same field. The result is this; that, from the house, grew admirably, not failing a kernel, as could be perceived; while that from the barn nearly all rotted. Nor is this all: the latter has been replanted, and re-planted, with seed similarly circumstanced; and the result is, it is yet decidedly billious, while the former is growing luxuriantly. We are not at all puzzled to make out the philosophy of it all. That which was secured in a warm, dry place, became sufficiently dry and hard to withstand the winter; while the other, being damp, froze to death.

"How shall I kill that sorrel?" asks many a good farmer. "I have plowed it under deep, shallow, har-



rowed, hoed, dug, and talked about it, long and loud, but all to no purpose. Like the Dutchman's balky horse, it is still *thar!*"

The most effectual mode of carrying the "war into Africa," within the scope of our observation, is to commence depredations after the first plowing, as soon as it gets clearly up, when it will move easily. Take a sharp toothed harrow in a hot dry spell, when King Sol comes out in all his glory, and sheds not a genial, but a withering ray upon all up-rooting processes, then give it Jesse. Don't make pretensions of any claims upon humanity, but give it one of Uncle Jake's drubblings; and you will certainly have the satisfaction of seeing the vanquished foe respectfully retiring, or in a more happy phraseology, becoming "beautifully less."

In the June number of the Farmer, friend Bradner fixed up a Short-Cake Pie, which he fancies would be compatible with my cream taste. Permit me to say, that is the article that takes all compassion out of me; and in the acme of delight, my vanity would tempt me to perpetrate a leader of a wish, viz: Should I ever be so unfortunate as to be convicted of the crime of misdemeanor, may the penalty for my offense be, (and that too without hope of executive clemency,) that I shall by my own physical exertion tunnel the Rocky Mountains, provided that previously to my ingress, its flinty substance shall be transformed into a beautiful Strawberry Short-Cake.

Respectfully,

R. C. RUMSEY.

Green Oak, June, 1852.

Mrs. Bradner, friend R.

#### FARMERS' CLUBS.

A powerful agency for the dissemination of agricultural knowledge and a spirit of improvement, is Farmers' Clubs. Several of these are in active and efficient working operation and are doing much good. The N. Y. Farmers' Club holds weekly meetings, and they are attended and sustained by the most intelligent and successful farmers about N. Y. The information imparted by the discussions at these meetings is generally local in its character, and particularly applicable, as farmers usually talk but little and that to the point.

There are others about the country equally prosperous. We observe in the *Tecumseh Herald* a notice of an adjourned meeting of the "Union Agricultural Society of School District No. 6." The object of this meeting is to make arrangements for holding a cattle show and Fair the coming fall. Mr. J. V. De Puy is Secretary.

Four years ago a Club was formed in the township of Redford in this county. This Club held regular monthly meetings at member's houses, taking them in alphabetical order, each member taking with him his wife. At these meetings a discussion was had, of some question previously determined on, and at the close, a resolution was drawn up, expressing the sense of the Club on the question discussed.

Much interest was always elicited at these discussions, and but for some unfortunate circumstances which induced the discontinuance of the meetings, a great deal of good would have been accomplished.—The final plan, adopted by this Club, of conducting its discussions, was to appoint a committee of three to make out a report on some specified subject, and then turn the discussion upon the acceptance of the report. Some able reports emanated from this club, one of which "On breaking Colts," we published in the June No. for last year.

There should be one of these organizations in every township for the discussion of subjects relating to the culture of farm crops, the saving and applying of manures, the breeding of stock, economy in feeding and fattening animals, &c., &c. A preamble stating the object which the members had in view in forming the

society, with a few simple rules for their guidance, which will suggest themselves to the mind of any one, are all that is requisite to form such a body. As a temperance lecturer once said, who found himself cooling off under a protracted discussion of a by-law, "the pledge is constitution, by-laws, and every thing else." A united determination to improve is about all that is necessary to make Farmers' clubs useful.

#### DEAD ANIMALS FOR MANURE.

A writer in the *Maine Farmer* says, that he once buried an old horse in swamp muck in June and let it remain till next plowing time, when he opened the heap and the "stench was enough to knock you down."

The flesh and blood of animals are among the most powerful manures, equal to guano or poudrette. But instead of burying in one heap, the animal should be cut in pieces, the bones separated as well as may be from the flesh, and the latter distributed about in small pieces and covered immediately with muck or mould, or common soil even, if more convenient, and in this way made into a large heap, and in a few weeks you will have a cord or two of the most powerful manure, fit for any crop, the actual cash value of which will do something at least, towards repaying the loss of the animal.

If muck is used, it is better to be partially decomposed, as it will absorb the gases more perfectly.—When freshly dug it is wet, and apt to be in chunks as thrown out by the spade, which when piled up the gases do not readily penetrate, but escape more or less through the apertures in the heap. After two or three weeks it should be shoveled over; providing beforehand some plaster, charcoal earth, muck or mellow soil, whichever may be most conveniently obtained, commence at one end of the heap, and if a stench is emitted, apply your absorbing material. This shoveling over assists in perfecting the decomposition of both the flesh and the muck, and of course of bringing it into the proper condition for applying to a crop much sooner than if permitted to remain as first piled up. This is a much better mode of disposing of dead animals than that usually practiced, whereby they become a nuisance to the whole neighborhood.

"Well," says friend Skinner, whose manure and straw pile lies yonder exposed to the burning sun, "if I can't obtain manure for my farm without putting my hands into such a dirty job as that, my crops may starve. It's horrible, even to think of."

Why, but wait a little; Chemists are every day handling the very materials which compose the flesh and blood of that dead animal. We are every day consuming those very elements as food, but not perhaps in the same proportions.

Flesh and blood consist of	Carbon, 52 per cent.
(52 parts in 100)	Hydrogen, 7 " "
	Nitrogen, 15 " "
	Oxygen, 21 " "
	Ashes, 4 " "

—simple substances, entire y harmless and inoffensive, and upon the continual presence of which our very existence depends.

There are also small quantities of other substances, such as sulphur and phosphorus, which when putrefaction takes place, assume new forms, and produce that peculiar, disagreeable odor which is so offensive to friend Skinner.

LAPORTE CO. (IND.) FAIR.—The annual fair of the Laporte Co. Agricultural Society will be holden at the village of Laporte, on the 7th, 8th, and 9th days of October. We have received the list of Premiums to be awarded, which shows that there is an interest among our Hoosier brethren which amounts to something more than a name. One member offers \$10 for the best Mowing Machine, and the same amount for the best Sod Plow.—Success to them.

(Concluded from Page 195—this No.)

ly are too much averse to mental exercise. "I don't want to be 'bothered' with such things," becomes a habit, until through pure mental indolence, all measures for improvement are neglected. If there should be any hard thinking man in the world they should be farmers, or at least, farmers should be they. As to its paying, we have no doubts on that score—we know it will pay.

This prepared muck is nearly equal to charcoal as an absorbent, as well of heat as of liquid substances; therefore all soils are rendered warm by its application and will produce earlier and more vigorous crops.

If cattle are kept in stables, this muck should be strewn behind them, about a bushel to each animal, to be removed each day and a new quantity added. The floor should be water-tight. The plan of making a trench at the rear extremity of the animals, in which to place the muck and into which the urine of the cattle will readily find its way, as detailed in an article published in the January number of the "Farmer," is probably the best one ever adopted for stables.

Where sheds are not provided, the manure as thrown out, should have a sprinkling of plaster every other day, and the stables also. Stables kept in this way, one can enter without danger of being choked, or having to hold his breath. It is thought that the fumes that arise from the manure in a close stable, injure the sight of animals. We have often experienced the irritating effects of these gases on entering stables, and could readily conceive that a constant irritation would prove injurious to the eyes of animals. But where stables are kept well supplied with muck or some other absorbing material and plaster no trouble from the gases is experienced, as they absorb or transform them into salts, which are willing to lie quietly upon the floor.

We now come to consider *barn-yards* as places for the manufacture of manure. What is the proper shape for a barn-yard? "The farm of a flattened cone," says farmer G, "I want a barn-yard that I can always have dry, and be able to drive a load through without miring."—Very true, but in that case your liquid manure, the most valuable part, must nearly all be wasted, besides much that is necessary for your crops in the dung, will be washed away by rains. Now we argue that where six head of cattle are kept, there would be enough wasted in this way to pay for putting the barn-yard in proper shape to save these valuable substances, and cover it eight inches deep with muck the first year.

In the first place the passage way into the barn and out of it should, in our humble judgment, have no part or lot in the barn-yard, but should be separated from it by a fence, and a door and passage leading from the floor to the yard be made through some other part of the building. The idea should not be fostered any longer, that we must build barns forever, after the old fashion, let what will come. We need an improvement on this old style.

With all due respect for farmer G, our opinion is that the shape of the barn-yard should be his flattened cone, turned bottom side up, and scooped out; or in the form of a basin with a rounded bottom. The earth excavated from the centre, which can be done with plow and scraper, should be deposited on the outer limits of the yard,

forming a gentle descent into the centre, or a complete basin. After being leveled off and smoothed down it should have time to dry and harden before animals are turned upon it. Whenever there is a spare day or so, all hands should turn in and cover the whole yard with muck or mold and leaves from the woods, 6 or 8 inches deep on the sides, and a foot or more in the centre. This will soak up the urine and wash from the dung and will be carried out to the fields incorporated with the other manure, and it will be found that it is equal in value to the same quantity of stable dung, and some have declared that they would rather have one load of the former than two of the latter, and we have no doubt that on very sandy soils, or stiff clays, this estimate is within bounds.

The yard should be sown with plaster every few days during the winter and spring. The great increase of manure which the farmer is enabled to make by this arrangement, for enriching his fields, is a matter of so great moment, that it would seem almost superfluous to urge it upon the attention of our readers. Some say they have no time to attend to digging and carting muck.—But if by so doing you add one-third to your present products, better curtail some of the other labors of the farm. Seed down and plow less, and devote the same time to the remainder, and there will then be found time to dig muck and to draw it, and a higher rate of profit be obtained. No fact is better established in reference to farming in this country than this; that among farmers of ordinary means, the larger the extent cultivated the less the profit. Every farmer should confine his operations to the number of acres which his means enable him to supply with the enriching materials which he is yearly carrying off in crops of grain or grass, &c. And every prudent, reflecting farmer will do it, and thereby preserve the productive energies of his farm from exhaustion.

#### BASKET WILLOW.

We would call the attention of Farmers to the subject of the following article, which we find in the Albany State Register. The subject is a new one to American farmers; but the extensive use of willow now, for the manufacture of various articles, the small cost of production as compared with the high price paid for it, lead to the conclusion that few subjects are more important to the agriculturist.

Considerable attention is beginning to be paid to the cultivation of basket willow in the United States. The annual importation of the article into our country amounts to \$5,000,000, and this, large as it is, does not satisfy the consumption. The supply is derived from France and Germany, mainly, and costs here from \$100 to \$130 per ton weight.

The following specification of the three varieties of the plant best suited for basket-making, farming, tanning and fencing, we take, together with the statistical information on this subject, from an interesting article in the Philadelphia North American:

"There are three varieties of the plant regarded as best suited for basket-making, farming, tanning and fencing. Of these, the *Salix Viminalis* is most used in the manufacture of baskets, and, under favorable circumstances of soil and culture, an acre of ground will yield at least two tons weight per year, costing, when prepared for market, about \$35 per ton. The next species is the *Salix Caprea*, or Huntingdon willow, adapted for basket-making, but more extensively employed by English farmers for hoop-poles and fencing. When used for the latter purpose, the

manner of planting is described to be, 'by placing the ends of the cuttings in the ground, and then working them into a kind of trellis work, and passing a willow with the round the tops, so as to keep them in shape for the first two years. The tops are afterward cut off yearly, and sold to basket makers, thus obtaining a fence and crop from the same ground.' The hurdle fences of England, removable at the pleasure of the proprietors, are also made from the *Salix Capua*. The third kind of willow to which we have reference, is the *Salix Alba*, or Bedford willow, which is held in high esteem as a shade tree, and very generally cultivated for this use in England. It is remarkable for its beauty and rapid growth—affording a good shade, it is said, in two years after planting. The bark is also much prized for its superior tanning properties, while the wood, from its fine grain and susceptibility of a polish as fine as that made upon rosewood or mahogany, is in extensive requisition for shoemakers' lasts, boot trees, cutting boards, gun and pistol stocks, and house timber. This, too, is the willow that is chiefly used in England in the manufacture of gunpowder."

An acre of this wood, ten years after planting, has sold for \$775.

The willows may be successfully grown in this State, and in many other States in the Union. But little care is required to bring it to perfection. It can be produced profitably in a number of states at \$50 per ton weight.—Hundreds of thousands of acres of land, either unimproved, or yielding lightly at the best, if planted with the osier, might be made to yield immense profits.

On this point, an intelligent gentleman, who has a practical acquaintance with the subject, says:

"Every farmer will acknowledge meadow land to be poor that will not yield a ton of hay to an acre, which, when cured and in market, seldom sells for more than \$2. All men who are acquainted with the growth of willow for market, well know that an acre of land ought to yield at least one and a half tons' weight of it. The cost of preparing willow for market would not exceed \$40 per ton. Now, estimating hay at \$12 per ton, and willow at \$120, deducting from the willow \$40 per ton for preparing for market, there is a balance in favor of the willow of \$80 per acre."

Importers deny the feasibility of the cultivation in the United States; and they have a selfish and powerful reason for doing so. But Mr. W. G. Haynes, of this State, who is engaged in the production of willow for mechanical purposes, says:

"I have grown as good a quality of willow as is raised in any part of the world. That taken from two acres, cut last year, yielded me, clear of all expense, the snug little sum of \$433.75. If I had the means, I would purchase lands and plant thousands of acres of willow, and find a ready market for it."

An idea of the lucrative nature of the trade may be derived from the fact that the large importation of basket willow, made during the summer, by four or five houses in New-York, was not equal to even half the demand, which is increasing every day. Furthermore, it has been discovered by one who has industriously collected the statistics, that the amount of money paid for willow baskets alone, in the city of New-York, exceeds \$1,000,000, and that the sum paid for baskets shipped for the southern and West India markets, probably reached \$2,000,000 more. These facts are certainly important, and well worth the reflection of men who are situated for embarking in a business which, in all points of view, promises advantages so decided and great.

The North American concludes its article as follows:

"The native product would always command a sale here, in preference to that imported, by reason of the cleanliness of the crop and its freedom from bruising and breakage, occasioned by package in a ship's hold, not to mention that the imported article is the mere refuse of the foreign crop, which is generally carefully picked by the French and German basket makers, who retain the best qualities for their own manufacture into fabrics subsequently exported to this country.

"Besides the inducements which an extensive domestic demand for the willow holds out to our agriculturist,

Great Britain annually exports from the continent a large quantity of it, and there is no reason why producers of the raw material here should not supply the consumption of England as well as of the United States. In short, the project of cultivating the *Salix Viminalis*, and other species of the plant, adapted to manufactures, appears worthy to claim the earnest attention of the American farmer; and in view of the obvious rewards which it would yield his labor and capital, we are surprised that the subject has not long since been discussed in the agricultural societies of the land, and tried thoroughly by liberal and enlightened experiments. It is not yet too late to render it a valuable source of private and national revenue."

## CALIFORNIA.

### THE SEASON AND THE CROPS.

If there is on the wide earth a country," writes an intelligent farmer from the rich agricultural region of San Jose, "where the plowman overtakes the reaper, it is our own California," and certainly the product of the present season seems amply to justify the remark. It is here, in California, that—without the forced aid and laborious skill of the husbandman—the planter's seed ripens into a mellow and abundant harvest; and the reaper's work may be performed twice within the year. And it is here that the farmer may sow and reap his crops beneath cloudless skies, needing no shelter for his stacked grain, no winter stores laid up for the stock belonging to his farm. Bounteous nature has well provided for their wants, and the rich fields a tribute to industry, which well accords with, and requites the striving and impetuous spirit of enterprise on this soil. While by the dint of energy and skill, the resources of our commerce and our mines are monthly bestowing fortunes on hundreds of our citizens, the light labors of the agriculturist, facilitated by the natural advantages of our soil and climate, meet with a success which assures him that the golden grains of California wealth will spring from the soil at his bidding, as rapidly on the lowlands as among the mountains and along the banks of our streams.

The present season will be a proud one for our agriculturists, and those who, among our permanent citizens, take an interest in the products of California farms. In every part of the country, the plow has been busy in the "stubborn soil"—seed time has closed upon hundreds of acres of planted fields, and harvest will soon smile upon the labors of the husbandmen. The winter, which is now over, has visited our farming lands as well as the mining region with copious supplies of water, and everywhere the prospects of the farmer are as abundant and gratifying as those of the hardy miner. Fields of grain, of luxurious growth, reaching above the average height of man, and nodding their full and ripening cluster in the soft breath of spring, salute the passer-by with welcome "signs of promise." Day after day brings to our market great loads of vegetable produce of cultivated fields in the vicinity of this city, and the success of California garden vines is constantly the theme of remark among the admirers of Pomona's gifts and of comment by our cotemporaries of the quill.

The wonders of the vegetable kingdom which are frequently brought to our notice by friends residing in the vicinity of Sacramento, are sufficient to convince us that the season was never more favorable to the crops, nor crops more satisfactory even to the warmest enthusiasts in Agriculture than the present year promises.

[If there is a place on the wide earth for shiftless farmers, it is that described above, according to all experience.]

Always do as the sun does, look at the bright side of every thing; it is just as cheap, and three times as good for digestion.



We take the following article from the *Boston Cultivator*, upon a subject which we deem of very great importance, and we think it high time that the attention of farmers was more generally directed to it.

#### PRINCIPLES OF BREEDING.

NUMBER IV.

Many persons who are violently opposed to all crossing, and are loud in their advocacy of the opposite mode of breeding, do not seem aware of the fact, that many of the so-called "pure breeds" were derived from various crosses. It is not long since some of these special sticklers for pure breeds, were actively engaged in propagating and selling the Berkshire swine, in this country, and talked much of their purity of blood. Yet no one who knows anything of the origin of that variety, will deny that it is a mixture of several breeds. Youatt informs us that the present breed is a cross of the old Berkshire with the Chinese, Siamese, and Neapolitan. In fact it is not pretended by authors, that among the present valuable breeds of Britain, there is one that can be considered original and unmixed. Even the highly-esteemed Suffolk is stated by both Youatt and Martin, the most reliable authorities on the subject, to have been produced by a mixture of the old Suffolk, Berkshire, and Chinese.

It is not our intention to assert that all crosses of swine have been beneficial—we know there have been many improper crosses—but who will dare deny that great improvement has been produced from this course?

We come now to sheep. Here we have a most striking case in point, in the origin of the present Leicester, or Bakewell breed. Few breeds are more distinct in their characters than this, or transmit their peculiarities with more marked effect, when crossed with other breeds. Indeed it is well known that the Leicester has been much resorted to for the improvement of others, and has in part formed the source from which several other breeds have been formed—of which we may mention the improved Cotswold, or New Oxfordshire, and the improved Cheviot.

It is evident that Bakewell combined the system of crossing with that of breeding from one stock; for his animals were in the first place selected from different breeds; but after the cross had been carried to the desired point, and his standard had been attained, he confined his selection of breeding animals to his own stock. This was the course he pursued with horses, sheep, and swine. It was also the course pursued by Colling, with cattle.—And yet, in full view of their signal success, when it has been suggested to breed together some animals of extraordinary value that have been produced in this country, we are gravely told (not, however, by experienced breeders) that such a course "would be only insuring uniformity of defects, and making them, in the end, utterly worthless!"

Prof. Simonds, in a lecture delivered before the Royal Agricultural Society, 1848, observes: "Crossing is founded on a principle just as secure as Bakewell's system of care in selection, added to the in-and-in system. Every improvement of breed requires the same means to retain it which produced it; the chief of these is *care in the selection of stock*, so as to avoid, the tendency to hereditary diseases [or defects.]"

We will next refer to the origin of some breeds of horses. And first of the Arabian, whose history has been written with great care by the distinguished naturalist, Col. Chas. Hamilton Smith. He states as the result of his extensive investigations, that it is "a race of great *internixture*." True it has been cultivated for ages, till, in his language, it "is the most artificial, the first of high-bred horses, and the parent of the noblest breeds in the world."

The English Race-horse, according to the best authorities as Low, Youatt, and Smith—was derived from a mixture of the blood of the Turkish, Barbary, Arabian, Persian and Spanish horses, with more or less of the ancient British stock. The Suffolk, the Clydesdale, and even the most esteemed family of the Norman, are admitted to have had a mixed origin, though by skillful breeding they have attained great uniformity.

We might go on and adduce numerous examples in support of our position, from dogs, of various breeds, and also from fowls; but our limits will not admit.

The Leicester breed of sheep may in truth be said to have attained a world-wide celebrity, and if its originator had effected no other improvement, this would have secured to his name perpetual honors.

But how did Bakewell produce these sheep? It is unfortunate that we have no record of his proceedings from his own hand; but there are some authorities who throw light on the subject. Pitt in his *Survey of Leicestershire*, has embodied much valuable information on this point. He says:

"Mr. Ferryman, who has conversed with many of Mr. Bakewell's cotemporaries, states that he had formed in his own mind an ideal perfection, which he endeavored to realize; and that with this view he, with unwearied perseverance, and at something more than a market price, selected from the flocks around him such ewes as possessed those points which were most likely to produce the animal he wished for." (page 249.)

The same authority states that some of the sheep he alludes to, were the descendants of some which, several years before, had been brought from a section of Yorkshire, and crossed with the common sheep of Leicestershire. Jobbers were also in the practice of going to the Wolds to purchase sheep, and Mr. Bakewell, it is said, "engaged these jobbers not to offer their sheep till he had seen them, and taken out such as he thought would serve his own purpose. From these droves, or from flocks so bred in his neighborhood, and probably from a distant cross with the large long-wooled Lincolnshire, he bred his first short-legged, square-framed sheep."

"Animated by his early success, he still went on breeding from his own, or crossing with any others that he judged most likely to bring his own nearest to his idea of perfection; by which means, and (in the opinion of one of the oldest breeders in the country,) by a cross with the Durham sheep, by slow degrees he produced a form against which he believed no possible objection could be raised." (Page 250.)

Dickson, in his late work says: "Mr. Bakewell was ever on the alert in picking up any sheep which he considered would improve his own stock. It is said that when visiting an eminent breeder in Lincolnshire, he cast his quick eye on a flock of sheep belonging to his friend, which possessed fine points and good symmetry, and whose mellow touch and handling pleased him. He must have been a splendid animal to have satisfied such a man; and he prevailed on this breeder to sell the animal, as he stood rather low on the legs. His friend was induced to part with him, as breeders in Lincolnshire prefer those with rather short legs, provided the carcass be long and well formed. Mr. Bakewell considered the top a prize; and it was said this animal corrected many of the wrong points and defects of the Leicesters, particularly in the wool and the covering of the heads, which they so wanted. The wool of this sheep was of a closer texture than usual, and his head and ears well covered."

Robert Smith, an eminent sheep-breeder, in an essay on the "Breeding and Management of Sheep," for which he received a prize from the Royal Agricultural Society in 1847, observes: "The crossing of pure breeds has been a subject of great interest amongst every class of breeders. While all agree that the first cross may be attended with good results, there is a diversity of opinion upon the future movements, or putting the crosses together. Having tried experiments, (and I am now pursuing them for confirmation,) in every way possible, I do not hesitate to express my opinion, that by proper and judicious crossing through several generations, a most valuable breed of sheep may be raised and established; in support of which I may mention the career of the celebrated Bakewell, who raised a new variety from other long-wooled breeds, which have subsequently improved all other long-wooled breeds."

CASS CO. AGRICULTURAL SOCIETY.—This Society will hold its second Fair at Cassopolis, on the 5th and 6th days of October next. G. B. Turner is Secretary.



For the Michigan Farmer.  
SEED DRILL.  
ANN ARBOR, May 26th, 1852.

WARREN ISHAM,—

Dear Sir,—Moors' patent Seed Drill, manufactured by T. A. Haviland machinist, Ann Arbor, is one of the best drills for wheat ever got up. Last fall, at the solicitation of T. A. Haviland, the manufacturer, I used his Drill. Previously, however, one of my neighbors had used the same drill on a level, smooth lot, and he pronounced it perfect. The lot in which I used it was up hill and down side hills, loose stones and fast stones.—From part of the field, however, the stones had all been taken out; this part I commenced upon fully expecting that when I came to the stony part, I should have to abandon the drill. But no, the first big, hare head solidly imbedded, was easily passed over, the second and third and so on, until the whole was finished. There is now twenty-five per cent. more wheat on the lot than ever stood on it before, with the same quantity of seed, and still more difference in that and an adjoining lot that was sown broadcast. I noted above that my neighbor pronounced it perfect, and for his land it was so; but for mine and all other rough land in the state I have described, one or two small additions are required to be made, (which will be made) and then no farmer who has used one will ever broadcast another handfull. If a farmer is not able to own one, two or three can join together. Farmers coming to Ann Arbor on business, can have an opportunity of seeing and judging for themselves in time to have their orders for drills timely supplied.

RICHARD B. GLAZIER.

The following Circular was received too late for publication in our June No., and as we have not received the proceedings of the convention, we publish this now. We hail this movement as a step in advance in forwarding the great interest we cherish, and which all are laboring hopefully to promote. We fear, however, the thing was too hastily carried forward, for the different States to be properly represented; there, and a want of interest be the result; but we hope not.

CIRCULAR.

NATIONAL AGRICULTURAL CONVENTION.

WHEREAS, the Massachusetts board of Agriculture, at its meeting held in Boston, January 14, 1852, requested its President to enter into correspondence with the Presidents of other State Agricultural Associations on the expediency of calling a NATIONAL AGRICULTURAL CONVENTION;—and whereas the Pennsylvania State Agricultural Society, at its meeting at Harrisburg, on the 20th of the same month; and the Maryland State Agricultural Society, at its meeting in Baltimore, on the 4th of February, adopted similar resolutions, and recommended the formation of a National Agricultural Society;—and whereas the New-York, Ohio, and other State Societies, through their Presidents or by published Resolves, have expressed similar views in relation to the necessity of a closer bond of union between all such institutions throughout our country:—

Therefore, the undersigned, believing from these indications that the time has fully arrived for a confederation of local Agricultural Societies in the United States, and in conformity with a resolution of the Pennsylvania Society, authorizing the Presidents of the three first named Associations to designate time and place—do hereby invite Delegations to meet in Convention in the City of Washington, on the twenty-fourth day of June next, at 10 o'clock, A. M.

The objects of this Convention are to organize a NATIONAL AGRICULTURAL SOCIETY, to which the various Agricultural Societies may be auxiliary; to consult together upon the general good, and to establish, by this Society, or such other means as the Convention may devise, a more cordial and widely extended intercourse between agriculturists in our own country and in other lands; to create additional facilities for the acquisition and diffu-

sion of knowledge, by books journals, seeds, and other objects of interest to the American farmer and gardener; and to act on such other matters pertaining to the advancement of Agriculture as the wisdom of the Convention may judge appropriate.

For these purposes the undersigned earnestly solicit delegations from the various State, or other organizations, for the promotion of Agriculture in the several States and Territories; and where such organizations do not exist, delegations from such districts, consisting in all cases of such number of persons as it may be deemed expedient to appoint.

As it has been considered desirable to name an earlier day for this Convention than was at first expected, this circular is issued before the concurrence of several of the State Agricultural Societies could be obtained. Their respective Presidents are therefore requested to add their names to this call, and to give immediate publicity thro' the papers and periodicals of the day.

A large and general attendance is confidently anticipated.

Societies will please transmit at an early date a list of the delegates they have appointed, to DANIEL LEE, M.D., Agricultural Department, Patent Office, Washington.

MARSHALL P. WILDER,	President Mass. Board of Agl.
FREDERICK WATTS,	" Penn. State Agr. Soc.
CHAS. B. CALVERT,	" Md. " " "
HENRY WAGER,	" N. York " " "
THOMAS STOCKS,	" South Cen. Agr. Soc.
ARTHUR WATTS,	" Ohio State Board of Agr.
JAMES TALLMADGE,	" Am. Institute, N. Y.
JOHN C. GRAY,	" Mass. Soc. Prom. Agr.
JOSEPH A. WRIGHT,	" Ind. State Agr. Soc.
GEO. W. NESMITH,	" N. H. " " "
FREDERICK HOLEROOK,	" Vt. " " "
JAS. B. HUNT,	" Mich. " " "
JOSIAH CHAPIN,	" R. I. Soc. for the Encouragement of Domestic Industry.

May 20th, 1852.

Editors will notice this Circular.

For the Michigan Farmer.  
LEICESTER SHEEP.

PLYMOUTH, June 7th, 1852.

MR. EDITOR:

In the June No of the Farmer Mr. S. Witter enquires for the pure Leicester Sheep, in answer to which it may be stated that thirty five of that class of Sheep are owned by J. Shearer, of Plymouth, and that he has among the number fourteen Buck lambs, which will be for sale the coming fall; also he has some of the half blood to exhibit the utility of the cross with other grades of sheep which are admissable, and should Mr. Witter wish to obtain this class of sheep, he undoubtedly would do well to call on Mr. Shearer and see for himself the quality of his sheep, and as for the price, it will be made according to quality.

J. SHEARER.

P. S. Friend Betts:—Universal complaint is made of the seed corn decaying in the ground this season, owing to its premature ripening in the extreme warm weather last September, and by being cribbed before the cob became dry enough to keep, although those who selected seed and kept it dry found it a failure. Some attribute it to the uncommon freezing while exposed to dampness in the winter and others to the coldness of the ground in which it is planted.

Respectfully yours,

J. SHEARER.

[We have complaints from every part of the State. It is impossible to say what the cause is. We would like to hear what those who have tried it say about it.]

POULTRY.—W. P. Newcomb: If you will address Mr. George Hentig, Marshall, Mich., you will obtain the information desired.

## WANTED—A FARM SCHOOL.

Among the mooted questions, which our best practical farmers, after a discussion of years, have been unable to settle to their own or to any body else's satisfaction, is the comparative value for feeding purposes, of hay—cut and uncut. Now we want no better evidence of the necessity of science, or system, applied to agricultural operations than is afforded by this unsettled question. The men who are claimed to be the only practical farmers—the only farmers worthy of the name—have had possession of the land of Massachusetts, and of the cattle on its thousand hills, since the Pilgrims put foot on Plymouth—for 232 years—and they have raised and fed and slaughtered hundreds of thousands of bulls and bullocks and sheep and swine; but to this day are unable to tell how much feed it takes to make one pound of pork or beef; or what, of all kinds of fodder—Indian corn, the general stand-by, alone excepted—is the most economical.

Now science, as advocated by this Journal,—not simply the science of the schools, but science in its widest sense—would long since have settled this, and other kindred questions. This science, which we preach and strive to practice, requires system in every step; each operation on the farm, then, becomes an experiment: the farm is one vast laboratory; earth, air and water are the elements in which we deal; every hour is one of pleasing anxiety every season brings with it its stock of doubts to solve, and produces its crop of knowledge gained. The farmer's life becomes one of constant and healthful interest; his mind, like his body, grows strong by labor, and he stands forth among his fellow men at least their compeer in intellectual, as in physical vigor.

It is mean and cowardly to shrink from the hearing and telling of wholesome truth; and though "Tray, Blanche and Sweetheart" may bark at us, we feel it in our inmost bones, and are not therefore afraid to declare it, that despite our boasts,—despite our motto that "Agriculture is the noblest occupation of man"—we neither are, nor do we feel ourselves to be the equal of many of our fellow men, of other professions; and what is bad, too, they do not deem us their equals. Let the man who doubts this, postpone his huffiness for a few moments, and put to himself the question, "Of two sons, one eminent as a lawyer, commanding the admiration and respect of the country, by his abilities; the other a farmer, following in his father's footsteps at the plow,—of which are you most proud? Whose opinion goes farthest with you? Who has the most weight in the State?" The professional son, without doubt. 'Tis the same if he was a pious and learned divine; or a well-read and skillful physician; or an ingenious and reliable mechanic.

There is not one of the leading occupations of men, that does not call into more active exercise the mental faculties of those engaged in it, than our own. These faculties, like our sinews, are strengthened by the exercise; and in this land, where "the mind is the measure of the man," and labor is honorable, he is most honored, whose mind most labors.

Fellow farmers, let us pray you to meet this question on its merits, and as, from its importance, it deserves to be met; and not with boots and hugs. There exists no reason under heaven, why the farmer should not be the intellectual equal of the proudest statesman, or the most profound philosopher; and why he should not be thus elevated by the very necessities of his profession; except that we have voluntarily degraded agriculture to the level of any ordinary drudgery, by claiming for its pursuit no other qualifications than bodily strength, and a capacity to walk in the cider-mill-track of a settled routine. We have not only done this, but we have fiercely fought all who dared to argue that we were wrong. We have doomed our children, too, to be drudges for life,—mere automata, following, machine-like, the movements of some model,—instead of using the reason, which the Lord of the harvest implanted in the minds of husbandmen, as of others. And if, as wise and holy men have thought, the kind, if not the degree of happiness which heaven affords, de-

pends upon the bent of our minds here, do we not rob those who look up to us for instruction by precept and example, of what we can never return to them?

Let us now lug in the two sons again, for an illustration. Why is it that the one intended for a profession is sent to school and to college to be thoroughly educated, and the other is put on the farm, as soon as he has learned to spell cow with a k, and to imitate in his hand-writing the travels of a half drowned fly escaped from the inkstand?

It is because you know that education is necessary to the advancement of the professional man, and because you believe that it will not aid the farmer. This is a woful error. Napoleon declared, that of two armies, otherwise equal, that which was the most intelligent would surely be superior; and he proved it by dashing to atoms the machine men of Frederick the Great; and all others built after the same model. If then, an active, enlightened mind is an aid to the soldier in the rude shock of war, when brute force on the part of the rank and file, is supposed to be alone necessary, why should it not be an advantage to the plowman? and if the plowman, why not the sower and the husbandman? why not the farmer who is to direct the animal force on his farm?

Let farmers, then, accustom themselves to regard as a necessity, a good farm school, where their sons may be educated in all the branches, which will benefit them in their future pursuit; and enable them to elevate their calling, and themselves, to a rightful position. Here, and here alone, can be carefully examined and accurately answered questions, like that with which this article commenced. Individuals may endeavor to settle these and similar questions. But few, that have the will, have also the pecuniary ability, the facilities and the perseverance required; and the results obtained will not be as satisfactory or as reliable, as those furnished by an institution, where system is known to direct every branch and every single operation.—*Journal of Agriculture.*

## RURAL ARCHITECTURE.

As many of our readers are more or less interested in the matter of Rural Building, we make some extracts from Lewis F. Allen's recent work, which was noticed in our last number.

"It is the idea of some, that a house or building which a farmer or planter occupies, should, in shape, style, or character, be like some of the stored-up commodities of his farm or plantation. We cannot subscribe to this suggestion. We know of no good reason why the walls of a farm house should appear like a hay rick, or its roof like the thatched covering to his wheat stacks, because they are the shapes best adapted to preserve his crops, any more than the grocer's habitation should be made to imitate a tea chest, or the shipping merchant's a rum puncheon, or cotton bale. We have an idea that the farmer, or the planter, according to his means and requirements, should be as well housed and accommodated, and in as agreeable style, too, as any other class of community; not in like character, in all things, to be sure, but in his own proper way and manner. Nor do we know why a farm house should assume a peculiarly primitive or uncultivated style of architecture, from other sensible houses. That it be a *farm* house, is sufficiently apparent from its locality upon the farm itself; that its interior arrangement be for the convenience of the in-door farm work, and the proper accommodation of the farmer's family, should be quite as apparent; but, that it should assume an uncouth or clownish aspect, is as unnecessary as that the farmer himself should be a boor in his manners, or a dolt in his intellect."

"There are found in the older States many farm and country houses that are almost models, in their way, for convenience in the main purposes required of structures of their kind, and such as can hardly be altered for the better. Such, however, for the exception, not the rule; yet instead of standing as objects for imitation, they have been ruled out as antiquated, and unfit for modern builders to consult, who have in the introduction of some real

improvements, also left out, or discarded much that is valuable, and where true comfort is concerned, indispensable to perfect housekeeping. Alteration is not always improvement, and in the rage for innovation of all kinds, among much that is valuable, a great deal in house-building has been introduced that is absolutely pernicious.—Take, for instance, some of our ancient-looking country houses of the last century, which, in America, we call old. See their ample dimensions; their heavy, massive walls; their low, comfortable ceilings; their high gables; sharp roofs; deep porches and spreading eaves, and contrast them with the ambitious, tall, proportionless and card-sided things of a modern date, and draw the comparison in true comfort, which the ancient mansion really affords, by the side of the other. Bating its huge chimneys, its wide fire-places, its heavy beams dropping below the ceiling overhead, and the lack of some modern conveniences, which, to be added, would give all that is desired, and every man possessed of a proper judgment will concede the superiority to the house of the last century.”

“Another difficulty with us is, that we often build to gratify the eyes of the public than our own, and fit up our dwellings to accommodate “company” or visitors, rather than our own families; and in the indulgence of this false notion, subject ourselves to perpetual inconvenience for the gratification of occasional happiness or ostentation.—This is all wrong. A house should be planned and constructed for the use of the household, with incidental accommodation for our immediate friends or guests—which can always be done without sacrifice to the comfort or convenience of the regular inmates. In this remark, a stinted and parsimonious spirit is not suggested. A liberal appropriation of rooms in every department; a spare chamber or two, or an additional room on the ground floor, looking to a possible increase of family, and the indulgence of an easy hospitality, should always govern the resident of the country in erecting his dwelling. The enjoyment of society and the intercourse of friends, sharing for the time, our own table and fireside, is a crowning pleasure of country life; and all this may be done without extraordinary expense, in a wise construction of the dwelling.”

“There is again a grand error which many fall into in building, looking as they do only at the extent of wood and timber, or stone and mortar in the structure, and paying no attention to the surroundings, which, in most cases contribute more to the effect of the establishment than the structure itself, and which, if uncultivated or neglected, any amount of expenditure in building will fail to give that completeness and perfection of character which every homestead should command. Thus the tawdry erections in imitation of a cast-off feudalism in Europe, or a copying of the massive piles of more recent date abroad, although in miniature, both in extent and cost, is the sheerest affectation, in which no sensible man should ever indulge. It is out of all keeping, or propriety with other things, as we in this country have them, and the indulgence of all such fancies is sooner or later regretted. Substance, convenience, purpose, harmony—all, perhaps, better summed up in the term expression—these are the objects which should govern the construction of our dwellings and out-buildings, and in their observance we can hardly err in the acquisition of what will promote the highest enjoyment which a dwelling can bestow.”

**CURING BEEF IN TEXAS.**—A correspondent of the N. O. Picayune, writing from Corpus Christi, says:

“The object most worthy of notice here is Col. Kinney’s large steam manufactory for curing beef. It is on the plan invented by Dr. Lardner, and improved by Geo. Stackweather, of Connecticut. The meat is preserved by the vacuum process, and being gradually worked in large iron cylinders, all the animal heat, air and blood are extracted, and the meat thoroughly cured by the pickle, so that it will keep perfectly sweet for the longest voyage round the world. The process is effected in twenty-four hours, and the factory makes about sixty barrels per day.

The machinery for this manufactory cost \$24,000. It is the most complete establishment of the kind, perhaps, in the Union. The factory is about two miles above the town, immediately on the seashore.

The slaughter-house is just above it, where the cattle are driven up in a pen and killed. Large vats are made for curing the hides, and so complete are the arrangements that everything is saved, even to the horns and bones.

**HILLSDALE CO. SOCIETY.**—This Society holds its next Fair at Jonesville; at what time, does not appear.

### FINE STOCK.

What obstacle opposes the introduction more generally into our State, of improved stock? A few animals are scattered about, fine animals, good enough; but what can they do towards improving the herds of the State? Their influence is scarcely perceivable. There should be fifty fine animals brought into Michigan the present year; and we repeat the question, what obstacle is there in the way? In a private letter from Lewis F. Allen, on the subject of fine cattle, he says:

“Your Michigan farmers are more behind the progress of the day in improving their *neat* stock, than in any other of our rich agricultural States, old or new; and I have very little hope that they will give me any sort of encouragement in the way of purchasing. I have not as yet sold half a dozen animals to the people of your State, during the eighteen years in which I have been engaged in breeding them; and I am the nearest stock breeder to them out of that State. Good stock is rapidly advancing in price and value, and if your farmers intend to have good stock, they must buy good stock to breed it from.”

Mr. Allen holds a sale of his stock on the 18th of August next, comprising over 60 head of pure Short Horns and Devons, and nearly as many more of other grades.—For further information, see advertisement in this No.—Our farmers will find it to their advantage to attend this sale.

### WEEDS.

“One year’s seeding,  
Makes seven years’ weeding.”

What are weeds made for? To keep the boys out of mischief. Is not that it boys? Every thing was made for some purpose—nothing made in vain. The earth and air contain the elements of all life, and where nothing useful grows, nature supplies herself with a covering of weeds. They never forget us—never forget to grow. Who cannot vouch for the truth of the old adage above. They are most unmerciful tormentors of one’s ease. For when you would take a cool seat in the vine covered veranda, which faces the garden, to contemplate for an hour the beautiful plants and flowers, bursting with life, you encounter the impudent gaze of an army of weeds. Rest and ease are out of the question, for no farmer who has a conscience and the least particle of Combativeness can feel at ease until the intruders are removed out of decent company. Again after your wheat, oats &c., are secured and you feel a sort of disposition to retire upon your income and become a gentleman farmer for life, you think you will take a stroll through your rich corn field, which you left as clean as an onion bed just before harvest, and what a sight to behold! Weeds as thick as “hair on a dog’s back,” and going to seed. You conclude that there is no safety as long as there is warmth in the rays of “old Sol;” that to keep free from such neighbors they have got to be watched by day and by night, for like the semi-savage Algerines, if defeated one day they are ready for fight the next. They must be watched and fought and fought until old winter more potent freezes them to death as some farmers do their cattle.



## HORTICULTURAL DEPARTMENT.

For the Michigan Farmer.

## BEAUTY AND UTILITY.

MR. BETTS:

Dear Sir—In the great struggle for agricultural advancement, too little attention is paid by many of the most prosperous devotees of Ceres and Pomona to the ornamental branch of the noble pursuit of farming; in fact, in my seem to think, while cultivating their broad acres, that labor which does not yield a quick return in dollars and cents, is illy bestowed, and consequently, eschew every effort at ornamenting; and forego a thousand enjoyments and gratifications, which might mingle with their labors, beguile many tedious hours, and lend new charms to their pleasant homes.

There are many hours "between showers," and at other odd times, through the course of the year, when the most industrious and assiduous farmer finds himself idle; these devoted to the culture and training of a few ornamental shrubs about the door-yard, will pay a hundred fold for the few hours devoted to them; for the rose, "the gem of flowers," will smile her gratitude intelligently, in return for these small favors, as fully as the animal testifies his gratitude, when he licks the hand that feeds him. It is the duty of every one who has a home, to multiply around it those charms and associations, which will render it the subject of happy reminiscences to his offspring in after days, when tossed far away on the stormy sea of life.—This may be done by blending the useful and the beautiful.

A child is pleased with a flower, which shows that the tender mind of the young is highly susceptible to the language nature whispers to our hearts through the opening bud and expanded petal; and as this susceptibility is peculiar to the human family, it should be fostered and encouraged in the young and tender mind, which like an opening flower receives a tone, or complexion from surrounding circumstances and incidents of every day life. The culture of flowers has a tendency to elevate and refine the intellect, inasmuch as it legitimately leads the mind to investigate and penetrate those mysterious arcana of nature which to some are a sealed book; the mind, after the first excitement of wonder and admiration has subsided, is led to search from effect to cause—to trace from fact to principle—to study the effect of symmetry and arrangement—contrast and monotony—light and shade—sunshine and shadow—the smiles and frown of nature; and as a matter of consequence to study the philosophy of chemical affinities, and to draw lofty conclusions from minute results. The gradual development of the opening bud, the gorgeous display of the unfolded flower, and the rich fragrance upon the air, often seduce the tender and unwilling hand to labor, not as a task, but as an amusement.

A few hours, each spring, judiciously employed, will fairly establish around the farm-house, a sufficiency of ornament, in climbing roses, creepers, and evergreens, to relieve the eye, and afford a pleasant and beneficial employment to the younger members of the family; and these few hours will not be missed from the farm.

But it is said "a fruit tree will occupy no more space than a mountain ash, an *arbor vite*; and that with the same care and culture necessary for the prosperity of those, merely ornamental trees, will yield both shade and fruit." This is true; but if there is any thing in bad taste, it is peaches, plums and apples, on a hot autumn day, scattered about a door-yard, or perchance tramped under foot, covered with wasps and hornets, and loading the air with a sour and unwholesome smell. This is too apt to be the case when fruit trees, in their infancy, meet with the misfortune of being planted in the inhospitable door-yard, where the unlucky fruit cannot choose but fall on the very threshold; where the refuse and superabundance are left to rot. In cities and villages, where a few fruit trees are not backed up by a large and prolific orchard, and where a superabundance is not likely to occur, (especially in view of the kind care and assiduity of the

street boys,) there is some excuse for using fruit trees for the double purpose of ornament and utility; but in the country there is none; on nearly every farm lie idle acres begging to be employed, and sighing over their barrenness.

It is to be regretted that that busy, but often indiscreet implement, the noisy axe, does so much mischief in its very first feats on the new farm, in felling from about the domicile the primeval forest trees, that a thousand years could not replace in their native grandeur; a few acres should be spared them. Every farmer requires his timber preserved: let it be around his house, when in the summer time it will charitably envelope him in the grateful mantle of its broad shadow; and in the winter time, with its outspread arms, protrudingly shield him and his flocks, and sing his nightly lullaby as it mingles its mourning voice with the hoarse bellowsings of the fierce north wind.

Two pictures are presented to my mind; the one rarely to be seen, the other too often.

The first presents a neat farm-house, surrounded by ten acres of native forest, interspersed with lawns, and divided by wide avenues. The stately oak, the feathery maple, and the graceful linden, blend their shadows across the lawn, affording a deeper shade to the groups of evergreens which dot them, and a purer tint to the pyramids and pillars of climbing roses which skirt them. Honeysuckles and woodbines, Virginia creepers and trumpet vines, ivy and jessamine, affectionately creep and twine around the trunks of the trees; dahlias and petunias invite you along the winding paths, beckon you up the curving avenues, and seduce you to the very sanctum sanctorum, veiled with vines and flowers. The garulous bluejay salutes you from the oak; the thrush, with her varied mimicry, hails you from the copse; the gay goldfinch welcomes you from the linden; and the cheerful laugh of childhood, opens your very soul, which gushes with joy. As you stand and gaze, and inhale pure pleasure through every sense, drink from the very fountain head of nature's loveliness, you involuntarily soliloquize, "Yes, there is a God!"

Such a homestead is within the reach of every farmer who has not felled his native forest; but such we seldom see. With what emotions of pleasure would the youth, "the sear and yellow leaf," look back to such a spot as "the home of his childhood," not a prison-house, but a garden of delight.

The other picture presents the farm-house upon the very road side, as if the proprietor was too niggardly to spare even the size of his house from culture. Wheat stubble and a grinning worm fence is all you can see in any direction, except it be a parched orchard, and the desolate house, broiling beneath an August sun, without a green thing to soften the melting scene, or soothe the suffering eye that turns gladly from it. The cattle are yarded in the road, where the manure is deposited "pro bono publico," and wasted by the cart loads,—wretched economy, that. The hogs lie stretched along the shabby fence corners, where they have rooted deep holes in search of a cooler retreat. And this is the whole sum, the entire picture. There is not even a beggarly bush of any kind, for ornament, about the whole premises. You catch no robin's harvest note—no saucy bluejay's chatter—no thrush's mocking melody; the breaking dawn is not ushered in with their merry song, nor the gray twilight wooed by their soothing valedictory carol. The is no childhood's shout to cheer, and bring back your thoughts to the starting point of your existence; no: there the panting innocent wrestles with the fierce noon-tide heat; the flowers, the birds, the beautiful, the innocent, avoid the spot as a pest-house. You turn from such a scene with a burning brow, and are constrained to soliloquize, "Yes, there is a—a—very hot sun to-day!"

What pleasant associations can be connected with a scene like this? Not a garden of delight, but a prison house; and such we often see.

This picture is not overdrawn; it is true to the life; and the proprietor, no doubt, could find a thousand arguments against uniting the useful with the beautiful.

A man may get dollars and grow rich without an ornament or flower about his house; but mankind may have



something else to do than to get dollars and grow rich; and Barney Hagerman says that he has no doubt but that many men and women of the present age were sent for higher purposes than to get dollars and grow rich. A man may get dollars and grow rich, without a child to bless his youth, stimulate his manhood, and cheer his old age; and yet a house is not a home without its children and flowers, to bind our minds and thoughts to the great centre of this great earth, the peaceful, quiet home.—While nature empties her overflowing treasure-cup into the lap of industry, and plenty waits upon economy, the tenderest affections of our natures are awakened by smiles of joy, blent with the prattle of infancy; and the rich fragrance of flowers, impresses that Divine approbation which makes home an Eden, a sanctuary worthy of our profound and constant devotion. My friend Barney Hagerman says, that without these, the homestead is like an instrument played out of tune, harsh, discordant, and unsoothing to the weary mind that seeks the solace of a miniature heaven on earth; a spot bedecked with flowers, loaded with sweet perfumes, and peopled with embodied angels. He says that without these associations, this *beau ideal* of rural enjoyment, the farmstead ceases to be a home, and is "just a place,"—an instrument without strings—an organ without pipes—a hopeless, cheerless, barren, bachelor spot; (and Barney Hagerman is a very sensible man.) While on the other hand, the associations of home are the sweet interludes, and their accompaniments, piped at intervals through the heavy and laborious Oratorio of life—sweet notes that breathe the energy of life into our being—that infuse themselves into our very souls—address themselves to our diviner natures, and whisper into our hearts the secret of a higher destiny for man, than mere clod-shodding after beggarly dollars and cents.

Belmont, May, 1852.

S. C. COFFINBURY.

For the Michigan Farmer.

#### PEARS ON QUINCE STOCKS.

I am sorry to see, by our friend Scott's communications in late numbers of the Michigan Farmer, that he meets with very poor success in the cultivation of Pears upon Quince stocks. I have appropriated a portion of my grounds to the cultivation of Pears upon Quince stocks and have so planted it that I can add new varieties, at my pleasure. In this Pear orchard I have some thirty varieties of summer, sixty autumn, and twenty winter.—These trees are now from one to six years old from the bud, and from eighteen inches to eleven feet high. I commenced planting my specimen dwarf pear trees along the borders of my walks in April, 1847. In the autumn of 1850 I found that I had many varieties in my nursery of which I had planted no specimen trees, and there not being sufficient room to continue the planting along the borders, I laid out the ground spoken of above. At one end the soil is a mixture of clay and sand, farther on almost all clay and ends in a ridge of clay and gravel. Before planting the trees I trenched the ground deeply and manured heavily with old stable manure. One division is planted with summer pears, another with autumn and the third with winter. Several of these trees bore fruit last year and the same trees together with many of the others are now loaded with fruit. The objects had in view in planting so many dwarf trees was to test the adaptation of the different varieties to grow upon Quince stocks, also to bring them into early bearing that I may propagate from them and be certain that the varieties I propagate in my nursery are true to the name.

Some varieties do not succeed well on the Quince, while others not only grow well but bear profusely.—Some of the varieties that Mr. Scott mentions as proving refractory in his grounds, I look upon as among my best growers.

Had I time I would give a detailed statement of the growth and production of each of my dwarf specimen trees, also the dwarfs in the nursery rows. I have some Bartlett's five feet high, in full bearing and growing finely. This variety does not always grow freely on the

quince. The Napoleon is a strong grower and good bearer. The Buffum is a strong grower both upon the quince and pear stock, it never fails to do well. The Dutchess d' Angoulême is a sure and rapid grower upon the quince, but not an abundant bearer. The White Doyenne does not grow so strong as the above, but does pretty well. The Dix Pear is probably one of the poorest of growers on the Quince. I budded a Dix upon a Quince stock and when it was eighteen inches high I transplanted it into a sandy soil. It stood there two years and did not grow an inch. In April, 1850, I placed it in the clay soil among my specimen trees, it began to grow immediately and counting the growths of all the branches, I found last fall that during the season it had made about six feet of new wood, the branches were long and slender. This spring I cut back to strong wood and the tree is now growing finely, yet I would not recommend growing this variety on the Quince without being double worked.

J. C. HOLMES.

DETROIT, June 10, 1852.

[We add the following from the Horticulturist, being some remarks of Mr. P. Wilder, on the same subject, at an Agricultural meeting at Boston.]

Much attention has been given of late years to the cultivation of the pear on the quince stock, and in relation to which I have been requested to give the results of my experience. As a general rule, no tree will succeed for any great length of time where it is grafted on any other than its own species. There are, however, exceptions to this rule, and among them, some varieties of the pear, which grow vigorously, bear abundantly, and which seem to be even better adapted to the quince, than to their own root.

An impression has extensively prevailed unfavorable to the cultivation of the pear on the quince. This has arisen principally from an improper selection of kinds, or from injudicious cultivation. There are, however, three considerations which are absolutely necessary to success, viz., a deep, rich soil,—the planting of the quince stock entirely below the surface of the ground,—and a systematic and scientific course of pruning, as the tree progresses in growth.

Objections to this species of cultivation have been made from the belief that the quince was a short-lived tree, and that the crop must necessarily be small from what are termed dwarf trees. Such, however, has not been my experience. On the contrary, I have seen pear trees on the quince root which are twenty-five years old, and which produce annually a barrel or more of fruit each, and for as long as I can see, they are destined to survive as long as any that I possess on the pear root. These may, probably have in some instances, thrown out roots from the pear stock, but whether this be so, or not, instances are not rare where such trees have attained in France the age of more than a hundred years, and we know of a quince tree in Massachusetts which is 40 years old, and which has produced 10 bushels of fruit in a season.

The pair, when grown on the quince, should always be trained in the pyramidal form. These may be planted in much closer order than when grown as standards.—We have known them to succeed well where grown at the distance of 6 feet apart in the rows and 12 feet between the rows. In this way Mr. Rivers, the great English cultivator, planted 2500 Louise Bonne de Jerseys and 1500 Glout Moreaus for the London market. We consider 12 feet apart, each way, a liberal distance. This would give 302 trees to the acre, and we are clearly of the opinion, that soil and selection of varieties being right, no crop, whatever would be more profitable. Such a plantation, with proper care would yield, in the fifth year, from 75 to 100 bushels of fine fruit. As to profit, this will not appear as an exaggeration, when it is known that Glout Moreau pears, a variety which succeeds admirably on the quince, have sold during the winter readily at one to two dollars per dozen, in our market.

We name as varieties which succeed well on the quince the following, and to which might be added many more: Louise Bonne de Jersey. Belle et Bonne. Vicar of Winkfield. Beurre d'Anjou.

Duchess d'Angouleme.  
Glout Morceau.  
Passe Colmar.  
Urbaniste.

Beurre Diel.  
Easter Beurre.  
Beurre d'Amaulis.

#### HORTICULTURAL EXHIBITION.

The Detroit Horticultural Society held its second Exhibition June 25th.

Mr. John Ford presented a fine collection of Green House Plants and five varieties of strawberries.

Hubbard and Davis exhibited an excellent Collection of roses, containing fifty varieties.

J. C. Holmes, exhibited specimens of the early purple Guigne, Bauman's May Cherries very fine. Excellent specimens of Cherries were also shown by F. Raymond and H. Hallock, of the Black Tartarian variety.

Hubbard and Davis, had several varieties on the tables that were not fully ripened, as also did Mr. Holmes.

Mr. Mixer, exhibited some fine Green House Plants, among which was a Fuschia five feet high. Also an assortment of cut flowers.

Mr. Adair's Garden was also well represented. Fine Strawberries were shown by Holmes, Stimpson, Miss Buel and Mr. Brush.

Some fine bouquets were presented by Holmes Hinchman. (Mr. Hinchman also presented a fine collection of cut roses and other flowers.) Miss Campbell. Mr. Hallock, Stimpson and Mixer.

The exhibition was a very fair one, though not as good as was anticipated.

#### AMERICAN POMOLOGICAL CONGRESS.

In compliance with a resolution passed by the American Pomological Congress, during its session at Cincinnati, in October, 1850, it becomes my duty publicly to announce that the next session will be held at the city of Philadelphia, on *Monday, the 13th day of September, 1852.* The Congress will assemble at 10 o'clock, A. M., in the Chinese Museum Building, South Ninth street, below Chestnut.

The Pomological, Horticultural and Agricultural Societies throughout the United States and Canada, are invited to send such number of delegates as they may deem expedient. And all delegates are requested to bring with them specimens of the Fruits of their respective districts.

Stages, and Boxes of Fruit for the Congress, may be directed to the care of THOMAS P. JAMES, Esq., No. 212 Market street, Philadelphia, should the owners be unable to give their personal attendance.

The various State Fruit Committees enumerated in the subjoined list, will, on or before the day of meeting, transmit their several reports to A. J. DOWNING, Esq., Newburgh, general Chairman of the whole. The Chairman of each State Committee is authorised, where vacancies occur, to fill up the number of his Committee to five members.

W. D. BRINKLE, M. D., President.

Philadelphia, May 1, 1852.

Michigan sends as delegates,

J. C. HOLMES, Detroit.

A. T. FROTT, Kalamazoo.

W. H. SCOTT, Adrian.

#### BUDDING.

There are several who wish to know the precise time to bud their trees. It depends so much on the season and situation, that the exact time cannot be given. But, as a general rule, plums and cherries should be budded by the middle of the present month, apples and pears, the latter part, or first of August, and peaches may be budded any time in the latter month, and sometimes as late as the first of September. The following conditions are necessary to success:

The stock must be thrify and growing freely, the bark

must part readily and cleanly from the wood, the buds to be inserted must be well matured; the bud must be cut from the shoot with a thin bladed, very sharp knife, beginning three quarters of an inch above it, taking a little deeper as the knife moves toward the bud, so that a small portion of wood will be taken out just beneath it, and continuing the same distance, or more, below; raise the bark carefully and slip in the bud, sliding it down until it sets firmly; then, with moistened bass-matting, cover all except the bud. These rules observed, success is certain. In ten or twelve days, the bandages will need to be cut, on account of the expansion of the stock.

The earliest formed buds only should be used in budding; those, therefore, near the extremities should be rejected.

From the Cincinnati Commercial

#### THE CINCINNATI HORTICULTURAL SOCIETY.

Met on Saturday, May 22, 1852. The minutes were read, and the President observed that as there had been some unusually late frost during the present week, the members were invited to report the amount of damage.

Messrs. Dulme and Yeastman reported some slight damage to the vineyards on the lowest situations.

Mr. Buchanan remarked that on warm, dry hill sides and elevated positions no damage was done except near the grass, where there was moisture. No tender vegetable was injured.

Mr. Ernst stated that even Potatoes and Tomatoes had escaped, much to his surprise, even in the lower grounds; some of his neighbors, even on high situations on Lickrun, had their Grapes crisped badly; others, lower down, had escaped.

S. Rentz found a little injury but only in the lower situations.

Mr. Ceticolas, of Clermont co., had found no injury from the frost.

Mr. Kelly reported the tender vegetables in Mill-creek valley as somewhat injured.

The injury at Lexington, Ky.; Dayton, Ohio, and Brookville, Ind., was reported by different members as having been severe.

Dr. Mosher found very little injury at his place, except in the lowest grounds; he had remarked that a very slight difference of elevation frequently exerted a marked influence.

Mr. Kelly suggested an explanation of the escape of certain locations, by reference to the fogs that accumulate at various elevations, and shaded the plants from the sun.

Mr. George Hill, Mill Creek valley says that his Beans, Tomatoes, Potatoes, &c., on the bottom land were all destroyed, and some injury was done on the second bottom.—The Grapes still higher are safe.

The prospects for a Strawberry crop being asked for Mr. Carter reported that there would not be half a crop from want of blossoms, but they have set well and will be fine—the old plants had died out, and the young ones did not appear to have force enough to bloom.

Mr. Buchanan set out a new bed of our own seedlings this spring which were blooming and setting fruit finely. Mr. McAvoy said they were nearly all old plants, selected on purpose.

Dr. Mosher did not find one in five with blossoms, but thought that it was attributed to the dry fall, and not at all to the winter.

Mr. Rehuss, in confirmation of Mr. Kelly's remark, stated that Hovey's seedling had scarcely a blossom—but Jenny's seedling was bearing well.

Mr. Rehuss stated that the night frost on the 19th and 20th of May, had no effect upon his vineyard near his house, on the top of the hill, except a few leaves near the grass. In his larger vineyard, a few of the lower rows have been badly frosted, but only where they were near a patch of grass, and received the wind from it as the dampness was thus carried to them. He referred to his having published that no

grass should be allowed among the vines, as the dews will be more copiously precipitated in such places.

[How uniform is the evidence, that a soil must be dry to succeed in raising fruit.]

#### SUMMER TREATMENT OF GRAPES.

In pruning grapes, in summer, no more leaves should be removed than will be necessary to admit the sun and air to the fruit. The leaves elaborate the sap and prepare it for the formation of the fruit, and it must be remembered that the grape is a voracious feeder, and requires a vast leaf surface to supply the necessary amount of food, therefore no more should be removed than barely enough to effect the purpose required. There should not be left more than two bunches of fruit on each side shoot, and when the vine has made three joints beyond the last bunch, it should be nipped, so that all the force of the vine may be thrown into the fruit. This is essential to success.

**MILDEW.**—Some complaint was made, last year, of grapes mildewing. We were shown a vine in Mr. C. Miller's garden, at Colon, St. Joseph Co., loaded with fruit, which was nearly all covered with mildew. The cause, or causes are, probably, a want of complete drainage in the first place; next, allowing the vine to become overgrown, and permitting it to bear fruit on shoots from the same old wood-spurs for several years, and again a want of sun and air. Experienced vine-growers now recommend sprinkling sulphur on the fruit and foliage, to remove mildew; and to prevent it, sprinkle the ground beneath the vine, while the fruit is young.

**MANURE.**—It is useless to undertake to raise fine grapes or many of them, unless the vines are well manured, every other year, at least. The best manures for general use are, the dung and litter of the stable, and soap suds from the wash. Bones are also good, and old plastering.—Downing says, "I have seen an Isabella grape produce 3,000 fine clusters of well ripened grapes in a season, by the liberal use of manure (barn-yard, I suppose,) and soap suds from the weekly wash."

**LAYERING.**—Those who may wish to increase their stock of vines, or prepare a few roots for their neighbors, will find layering to be, all in all, the best mode of doing it. Make the ground mellow about the vine, then open a small furrow with the hoe and, bring down a branch and cover it with soil four or five inches deep. They will become well rooted by autumn, and may then be separated from the parent vine, and planted out by themselves. It should be done between the first and middle of July. To hold the layers down, Mr. David Thomas uses two sticks, sharpened at one end, pressing them into the earth and crossing them over the branch, before covering. We prefer a flat stone, for the purpose, as it keeps the ground moist beneath it, which more readily induces the formation of roots.

The following article from the pen of Linus Cone, we find in the Rural New Yorker.

#### IMPROVEMENT OF OLD PEAR TREES.

**MESSRS. EDITORS:**—Twenty five years since I engrafted two small white thorn stocks at the root with the English Jargonelle pear. They were set in the fence corners, on land that had never been tilled. At the same time I procured and set a small tree of the Summer Bonchretien, here called the "Sibley Pear." The weeds and grass were kept away from around the trees for several years, then the grass was suffered to get in and remain. The Jargonelle trees grew finely and came early into bearing, and have borne bountifully every year since, but for two or three years the fruit, although large and fair, has been of little value, having been nearly tasteless, even when ripened in the house. The Bonchretien tree came into bearing several years later than the others and has borne sparingly every year since, until last year. The pears pro-

duced for a few years were large and fair weighing nearly a pound each, but for six or seven years the fruit has been gradually growing smaller from year to year until it became small, cracked and of little value.

Two years ago, an effort was made to renovate this tree,—and notwithstanding it had always been kept well pruned, I cut away nearly one half of the small branches and scraped it thoroughly and washed it with lye. The ground around the tree was dug up with a spade, care being taken to injure the roots as little as possible. But this did not appear to do any good; the fruit was poor as it was before. Last spring I procured from a blacksmith's shop where horses had been shod, about twenty bushels of manure, which was composed of horse manure, parings of hoofs, cinders, &c., this was spread around the tree and dug in.

The result of this treatment was, the tree last season was loaded with fruit, and had it been thinned out as it should have been, it would have been large and fair. As it was, it was nearly all so. The product was probably over twenty bushels. But what to me was the most remarkable, the fruit ripened in succession on the tree from the last of August till late in October, and the flavor was far superior to what it had been before. I intend the present spring to try to improve the flavor of the fruit of the other trees in the same way.

LINUS CONE.

Troy, Oakland Co., Mich., May, 1852.

#### CRANBERIES AN ENQUIRY.

Laporte Ind., May 7th 1852.

Will not some kind correspondent inform us what is necessary to be done to increase the growth of Cranberries in our wet prairies where they have naturally made a stand. The Cranberry grows in the same kind land in Michigan and in our state, but we do not know how to increase its growth, so as to make it profitable where it is now but thinly set, and it has occurred to me, that probably some of your readers may have made the discovery. Some of our land where they grow can easily be made dry by ditching or more wet by damming. Thus having control of the water, all we lack is the necessary knowledge of its proper disposition. So please learn us and receive the thanks of.

HOOSEER.

[The Cranberry generally manifests so great a disposition to spread, that where they were planted at a distance of eighteen inches apart, they have in two years completely covered the ground, crowding every thing else out. We think if our Correspondent could manage to give his ground and plants a thorough working for one year, there would be no want of growth in the plants. We would be glad to hear from any one who has had experience in the matter, as we deem the Cranberry crop an important one.]

#### ROSE INSECTS.

The following receipt is given in the N. E. Farmer for destroying insects on roses: To three gallons of water, add one peck of soot and one quart of unslaked lime.—Stir it well—let it stand for twenty-four hours; and when the soot rises to the surface, skim it off. Use a syringe in applying.

**TO KEEP BUGS FROM VINES.**—I have tried ashes, plaster, lime and tobacco juice, with some success, but a spoiled clam, the cleanings of a wool carding machine, or a lock of wool soaked in fresh oil, placed near the root of the vine, I never knew to fail, these also promote the growth of the vine. The bugs are attracted by the smell of the vine, but do not like tainted fish.—*Horticulturist*

# MICHIGAN FARMER.

Warren Isham, Editor.

DETROIT, JULY, 1852.

## HAY MAKING.

The hay crop of Michigan, in connection with the growth of stock and wool, is yearly becoming of greater importance. Good hay, hay so made and preserved that it contains all the original elements of the green grass excepting water, contains within itself every thing necessary for the growth and sustenance of animal life: while bad hay, may vary in quality from wheat straw to absolute poison. "Good hay, is long and large, hard and tough; color inclining to green rather than white; has a sweet taste and fragrant smell; and when infused in hot water produces a rich dark colored tea. In damp weather, good hay absorbs moisture, and becomes heavier. Bad hay will change a horse's appearance in two days. The kidneys are excited by it to extraordinary activity. The horse soon becomes hide-bound, emaciated, and feeble. His thirst is excessive. The disease does not produce death, but it renders the horse useless, and ruins the constitution. *Musty* hay is said "to be bad for the wind;" and it is certainly so for every part of the body."—(*Stephen's Farmer's Guide*.)

But, in order to understand practically how to make hay, a few general principles may not be uninteresting to our readers. Grass consists of a large proportion of *woody fibre*, a substance which conveys no apparent nutriment to the system, but which is necessary to enable the stomach to digest; and intimately united with this, are about  $8\frac{1}{2}$  per cent. of albumen and gluten—the *flesh forming principles*; and the following materials—Potash, Soda, Lime, Magnesia, Iron, Phosphoric acid, Sulphuric acid, Chlorine, and Silicia: to which we may add wax, or *chlorophyll*, and coloring matter. Now, with perhaps two or three exceptions, every one of these materials is necessary for the healthful growth of the body—but they are all in small proportion compared with the comparatively useless woody fibre. But albumen and gluten are very readily disorganized and lost by fermentation or decay; and most of the useful salts are as readily washed out by water; so that old hay, long exposed to rain, say the top of a stack that has stood for a year, is deprived of pretty nearly every thing which is useful in feeding an animal. And so just in proportion is hay good or bad when it is put under cover without having had any rain upon it, or when it has been exposed to several showers. In the first case, it contains everything that is useful; in the latter, it has probably lost a large proportion of its nourishment.

In a similar manner, Liebig has proved that pork, long salted, has parted with the greater proportion of its elements of nutrition, to the brine, leaving little else than grease and useless fibre; and that in fact, more sustenance would be obtained by drinking the brine, than eating the meat. The great object, therefore, in hay making, is practically, to bring the grass

rapidly to such a state of dryness, that *destructive* fermentation will not occur when it is put together in large bodies; and by all means in our power to prevent rain having access to it after it is cut. In our changeable climate, and in so wet a season as this threatens to be, rapidity of action is necessary; and we propose, from several years experience, the following process. Let it first, however, be observed, that there appears to be no danger of hay's heating or burning, unless water, in some shape, has been applied to the grass after cutting; that its own juices will not produce these effects; and that the salt, hereafter recommended, will prevent any improper and injurious fermentation. On an usually hot July morning, the dew having begun to rise, cut the grass as usual, and let it be in swaths till afternoon. Then rake the swaths into wind-rows; not too heavy, but so as to allow the sun and wind, if any, to penetrate; and by three o'clock, at latest, without cocking, begin to haul into barn or shed.\* The grass will be well wilted, soft, green, and

\* If the dews are heavy, it may be necessary to turn the swaths, cut early in the morning, before the grass was dry; as water, in any shape, is injurious. partially dry; on unloading, let one person stand by with a bucket of common salt, and scatter a good handful equally over every fork full; that is—one or one-and-a-half common pailfull's of salt to each load, or good ton of hay. Or if the hay is put into a stack, and sufficient to build the stack cannot thus be procured at once, immediately rake the hay into large cocks, before it becomes too dry; and when the stack is built, salt in same way. A certain degree of fermentation or heating will take place; but the salt melting prevents its going too far: sugar is formed, there is no dust, and the hay comes out in winter almost as green, and quite as sweet as when it was put by.

These remarks apply to Timothy, or Timothy with some clover in it, the only meadow grass with which we have had experience.

Clover, however, when pure, requires still more decided action. We all know how much is lost in this crop by the leaf burning, becoming crisp, and falling into powder when touched; and as the leaf is most nourishing, the loss is very serious. A few years ago, an experienced farmer in the Genesee country, N. Y., shewed us his clover hay, in spring, with the leaves as perfect, as soft, and almost as green as when cut. His plan was this. He cut the clover as usual; let it lie in swath till well wilted, but not dried; and then raked it into small cocks, without turning; and exposing it to the sun as little as possible. Here the clover heated, and by noon, or a little before, next day, he put it by, with salting. We have tried his plan to our full satisfaction, and recommend a trial of it to all who have clover. At the same time, we ought to state that both our friend and ourselves, use sheds for putting the hay in; and how this plan might answer in a large stack, we cannot say.

*Mustiness* in hay, is owing to a fungus, the product of partial decay. In itself, it is poison, and such hay never should be used for food: but salt, as above, will prevent its originating.

By the above mode of hay making, not only is the



edged by all mechanics and engineers to be the strongest and most perfect form of teeth, and works with less friction and wear, as the driving surfaces present to each other a rolling instead of sliding friction; this kind of teeth, on account of their rounded form, work much deeper into each other, and have little or no inclination to lift out of gear.

The last cut shows the construction of the truck wheels, which are 1½ inches larger in diameter, and revolve on larger circles at the end of the power—giving them an advantage over the smaller wheels. A section of a link is shown with the end of the flooring attached; these planks are all one inch wider, and consequently wear up by use, much closer, before bending or breaking under the weight of the animals. As a Rack and Pinion Power, the latter has every advantage over the common kinds in use; is manufactured at less cost; is equally strong and durable, and is more easily handled, as its weight is some two hundred pounds less.

Either of the above kinds of powers are offered to the public, each upon its own merits, with a full warranty as to workmanship, materials, and operation, (and with a guarantee of the right of using in all parts of the United States,) subject to be returned within three months—purchase money refunded. For prices, &c., see Illustrated Catalogue, furnished gratis on application, or by mail.

The first on the list is the highest in cost, and is found preferable in all cases, and under all circumstances. The power of the revolving platform being applied to the main shaft, by means of reels with larger diameters than the pinions used in the Rack and Pinion Powers, the stress upon the several parts is in no way as great—and the liability of wear or breakage, from use or accident is removed. The whole of the gearing consists of less than one-seventh of the number of cogs in the Rack and Pinion Power; and these are wholly removed from under the horses to the outside of the Power—free from dirt, dust, &c., and always easily kept in order or cleaned, which is an advantage over all Rack and Pinion Powers. This Power has also the advantage of the changing of force and velocity to accommodate it to any variety of work, without any additional cost or danger to the gearing or other parts. When the main shaft runs but fifty-six revolutions per minute, the diameters of the gears are such as to increase or decrease the velocity to two hundred and twenty-four, or as slow as fourteen revolutions per minute, when the animal, (either horses or oxen,) walk but two miles per hour—being about two-thirds the travel which is necessary with the Rack and Pinion Powers, to produce the same effect. This last fact is one of its principal features, and of the greatest importance to the farmer. The gearing, as well as pulleys and couplings, all agree, and can instantly be transposed—each to each and side to side. In this Power the centers of motion of the gears are always in the same position to each other—requiring no guard or binding track over the chain above the pinions, to keep the gears together, as is absolutely necessary with all rack powers, and which serve to check the force of the Power; and as the driving faces of the teeth on the rack and pinions become worn off, the loss of force increases, until they eventually stop, break, or slip by each other. The length of the sections or links of the chain, as also the width of the plaques of the flooring, are same as in the improved Rack Power last described. With the above advantages, together with the epicycloidal form of teeth, adopted this season in its construction, the superiority of this Power is readily seen.

This Power is admirably adapted for driving Thrashing Machines, Circular Saws, Cotton Gins, as also Machine Shops, Elevators, Ferry-boats, Discharging and Loading vessels, Pile-driving, Cross-cut sawing, Pumping, Grinding grain, Churning Butter, Cutting Hay and Stalks, Shelling Corn, Grinding Apples, &c. The angle of elevation necessary to operate this Power, is never greater, but often less than either of the others here described, and which is inside of one and a half inches to the foot, with horses weighing 1600 pounds each, and without any harness. It has also an admirable arrangement for adjusting and tightening the chain, not possessed by either of the others—together with an improved brake for stopping the whole instantly—all within the Power, and independent of the band and pulleys, and does not require to be changed, when gears and pulleys may be. The pulley used for thrashing, with this power, is but three feet diameter, to effect the same as a four foot wheel does with the Rack and Pinion Power.

In all cases the shafting of all machinery manufactured by us is made to run in Babbitted Boxes, they being the most durable and perfect box in use—and not generally used by other manufacturers.

## EMERY & CO'S

### OVERSHOT THRESHING MACHINE, WITH Vibrating and Revolving Separators.

Although over two thousand of these Threshers have been sold by us up to this time, and without exception have given the fullest satisfaction as heretofore made, we can safely say they are, as now made, worth at least fifty per cent more than heretofore, and without any increase in prices being charged for them.

Their construction is such that the grain and straw are carried by the cylinder from a level feeding table, over and between it and the concave, which is placed above instead of below as is generally done in others. The cylinders being 25 to 30 inches long, and 14 inches diameter, are much longer but smaller than those generally in use—giving more room for feeding, in proportion to work done, and doing it nearer the centre of motion, and working easier, as the smaller the diameter the greater the power. Again, we require but about half the number of spikes in the cylinder, and an increased motion, so that the spikes may pass through with a velocity sufficient to take off all the grain.

The concaves have an increased number of spikes, which for both cylinder and concave are swedged into uniform shape and size, from the best Swedish Iron. They are set with an inclination which admits the straw and grain to pass freely, and with as little breaking of

the straw as is consistent with a perfect separation of the grain—thus producing a sort of stripping or carding process. The concave is so confined as to be readily adjusted and present any desired angle of the spikes to the grain, and also increase or decrease the capacity of the throat, thereby retaining the straw a longer or shorter space of time in passing, as the condition and kinds of grain may require. By this arrangement, there is a saving of power of from 30 to 50 per cent over the ordinary Threshers, whose spikes pass each other at right angles, which operation necessarily breaks the straw into many pieces at the expense of much power—a process much more easily done with a good hay cutter with sharp knives, than with the rounded edges which well formed spikes present to the straw. The feeding-table is level, allowing the feeder to stand upright and be little annoyed by dust, dirt, &c.; the over-shot motion avoids accidents to men or machine, (by preventing any stones, sticks, &c. getting into it in feeding,) which frequently occur with the inclined feeding board. The grain by this motion is elevated sufficiently to be thrown upon a large sieve or separator, where it is separated from the straw and falls through upon the ground or floor, together with the fine chaff, dust, &c., while the straw is discharged at the end of the separator, ready for stacking or binding.

The Shafts of our cylinders are made of solid cast steel, manufactured and imported for us expressly for the purpose; and all the boxes or bearings are made of or lined with Babbitt metal. The boxes used by us are always of two parts, in order to be adjusted as they may wear, or to vary the position of the cylinder, as well as to allow them to be removed, if necessary for cleaning or repair, without removing the pulleys or other parts of the machine. This is an important advantage over those boxes which are made of a sort of tube, and only removed by first removing the pulleys, &c. &c. and are never adjustable to accommodate themselves to any wearing.

The Pulleys are polished and fitted to both ends of the shaft and confined by nuts and screws, and with our India rubber band which we invariably use, form a perfectly air-tight connection; thereby bringing the atmospheric pressure to our aid, and preventing any slipping of the band. A band of this kind, say 30 feet long and 2½ inches wide, will drive equally strong when four inches lower than if made of leather, causing less stress upon the shafts, allowing them to run with less friction and wear on both shafts and boxes.

### CLEANER AND THRESHER, COMBINED.

During the past three years we have spared neither time or money in endeavoring to produce, at one and the same time, a CLEANING THRESHER, which will perform as well and rapidly as our Thresher and Separator, with the same force of men and team to operate it, while the increased cost of such combination should not exceed the value of a good farming mill, (say 25 to \$30.) During the past two seasons we have succeeded to our entire satisfaction in all respects excepting cost of construction, the increased expense of manufacturing being some fifty to seventy-five dollars, and bringing the price fully up to that of Pitts' celebrated Patent Thresher and Cleaner, which has been extensively and favorably known throughout the whole country for the past fifteen years; and when adapted for two horses, well made, and driven by our two horse power, will do as well as any now in use, our own not excepted, setting aside perhaps something in quantity of work done.

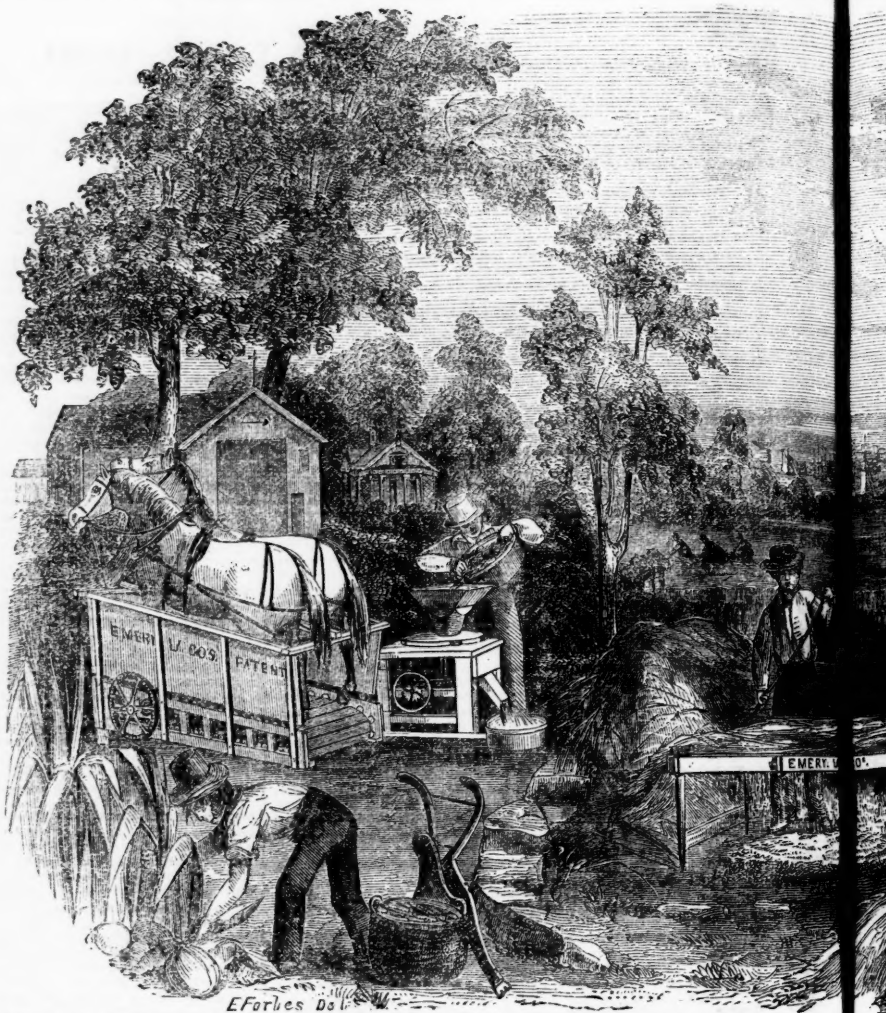
The great excess of the demand being for our Threshers and Separators instead of Cleaners, we are compelled to confine ourselves and facilities chiefly to the former, making Cleaners only to order, and at the price of one hundred dollars each instead of seventy-five as heretofore advertised by us.

From our own observations, and the slow adoption of the Cleaner combined, when used by farmers with barns and for their own purposes, we would not recommend them on the ground of economy, as the grain can generally be threshed better and faster with the Separator; and the simplicity of the one as compared with the other, together with the difference of skill required in those attending both kinds, is vastly in favor of the Thresher and Separator. Those farmers using their straw for feeding, or selling in market, find it much more valuable when threshed with the Separator. It is entirely free from the dust, dirt and fine chaff which is mixed thoroughly through the whole mass by the current of air thrown from a Cleaner.

In field threshing and where time is of the greatest consideration, and there is risk from exposure to weather, the straw of little value, large Cleaners, with more men and horses, are often preferable.

For testimonials concerning the utility and superiority of our Threshers and Separators, and also our Improved Rail Road Horse Powers, we refer the public to the following persons from among the many to whom we have recently sold them, and taken in exchange the Wheeler Powers, Threshers, &c., at a discount in favor of our own, of from five to fifty dollars each; and in nearly all cases, they are being used for public threshing.

Hox. J. M. SHERWOOD, Auburn, N. Y.;  
JNO. McD. McINTYRE, Esq., Albany, N. Y.;  
JNO. N. ROTTHERS, Esq., Lafargeville, Jefferson Co., N. Y.;  
H. L. STEWARTS, Root, Albany County;  
JACOB LANSING, Greenvale, Rensselaer County;  
REUBEN YOUNG, Berne, Albany County;  
GEORGE L. HAYNES, Fultonham, Schoharie County;  
SMITH & CO., Canajoharie, Montgomery County;  
DETMAR, Canajoharie, Montgomery County;  
DEAVENDORF, Fort Plain, Montgomery County;  
E. STILWELL, Fort Plain, Montgomery County;  
COOPER & WOODHUFF, Watertown, Jefferson County;  
JNO. A. DUNN, (Saratoga and Whitehall R.R.) Saratoga;  
JOHN POST, Beaverville, Oneida County, N. Y.;  
ELA MERRIAM, Leyden, Lewis County, N. Y.;  
J. C. COLLINS, Consvilleville, Lewis County, N. Y.  
RUSSEL KILBOURNE, Paris Hill, N. Y.  
WM. H. CHALMERS, West Galway, Saratoga Co., N. Y.  
PETER WEBER, Herkimer Co., N. Y.  
W. D. MASON, Jefferson, Ohio



## N. Y. STATE AGRICULTURAL SOCIETY'S HIGHEST

EMERY & CO

SOLE MANUFACTURERS FOR THE UNITED STATES, OF H. L. EMERY & CO'S PATENT

Manufactory on Hamilton, Liberty, and Union streets

ALBANY, N. Y.

During the past two years, we have sold nearly one thousand sets of these Improved Powers, with Threshers; and without exception, they have given uniform satisfaction, not one having been returned, notwithstanding our warranty is broad and liberal. They have been exhibited at all the principal Fairs throughout the country, during the autumn of 1850, and again in 1851, and with but two exceptions in the whole number of exhibitions, they were awarded the Highest Premiums—and in both these cases, before the patterns were as perfect as now; and the workmanship, in both having been done for us by contract, before we were enabled, with our facilities, to do all ourselves. In these instances, our Powers were entirely new, and not made with any view of exhibition—while those Powers receiving the premiums were made and finished up in all the working as well as other parts, with especial reference to competition at Fairs. In the one case, our Power has since established its superiority over its competitor, by receiving the Highest and only Premium in 1851, and in competition with the same Power, and at the hands of the same Society, the majority of whose awarding committee owned and were using the competing Power which received the award in 1850—giving our own the preference for its superior construction, ease of team, and efficiency. And in the other, we pledge ourselves to the public that it will do the same thing at their next Annual Fair, provided pecuniary interest or personal prejudice is not allowed to enter into the merits of the question.

Among the many Premiums awarded us for this Power, are the following: AT THE FAIR OF THE NEW-YORK STATE AGRICULTURAL SOCIETY AT ALBANY, IN 1850, the committee unanimously awarded us the Highest and only Premium on the endless-chain Power, and in competition with three others—among which was the Wheeler Railway Power, made and entered by themselves, (the same as we have extensively manufactured and sold for several years.) The chairman of the awarding committee says of the machines as follows: "We spent much time in examining the various Powers, first

"with the owners, and heard all they could say, and then in their absence, and the result most fully convinced me that yours was the best; and if I wanted one, I would give twenty dollars more for yours than for any other on the grounds." And on being written to, some months afterwards, concerning the same, he replies that—"As you have won your laurels fairly, it is just you should receive a full reward."

IN 1851, AT THEIR FAIR HELD AT ROCHESTER, the same Society's committee (thinner than before, better qualified, or attention and care bestowed during the whole four days of the Fair, have been or can again be secured,) awarded us the Highest and only Premium, for the best Rail Road Horse Power, and in competition with the same Powers as at Albany. The committee say, in their report, that "The contest was the closest between Wheeler's and Emery's—two manufacturing firms from Albany; but owing to the similarity of Powers, they were required to give a test by threshing one hundred large bundles of wheat; and notwithstanding Wheeler's best Emery's in three minutes, we are of the opinion that, as a whole, Emery's Rail Road Horse Power is entitled to the Premium."

This report of the committee being in favor of our Power, and with the difference in the results, if the superiority of its construction and operation is not established, it certainly will be, when we state that during the three days previous, at said Fair, with an entirely new Power, (borrowed for the occasion) of Hon. J. M. Sherwood, of Auburn, to whom it was sold some weeks before, in exchange for one of Wheeler's manufacture, but not yet used,) lighter horses, and little used to working it, we repeatedly threshed, of the same lot of wheat, one hundred sheaves in ten minutes, at the same elevation, and with but two-thirds the travel of the horses, required by the Wheeler Power, to do the same work; while the team used by them were following threshing with and well broke to their Power, and their Test Power made expressly for and having been previously used at several Fairs, and in good working order.



# **BEST AND LATEST PREMIUM RAIL ROAD HORSE POWER.**

**EMERY & COMPANY,**

**PATENT RAIL ROAD HORSE POWER (PATENTED FEBRUARY 24, 1852);**

**Wholesale Warehouse and Sale Rooms, Nos. 369 and 371 Broadway.**

**BANK, N. Y.**

Again, we would say, that in the test where there were but seventy-nine sheaves (instead of one hundred, as erroneously stated by the committee, in their report,) we were required, much against our convictions of justice, to put of our team, and use in our turn the very team from the other Powers, and that after doing the other's work, and wholly unused to working our slow Power, requiring their owner at their heads to keep them back, and from walking overboard, as they were inclined to do—no harness being used; thereby disadvantageing us to the extent of eleven minutes with the seventy-nine sheaves, or a little over seven sheaves per minute, instead of ten, as we had repeatedly done with our own team. These facts, together with those of the Concave and Bonnet of their Thresher being raised for the test; also, that of their Power slipping its gear, flying its band, stopping them nearly ten minutes to repair, in the middle of the test, (which was allowed by the committee, thereby reducing their working time to eight minutes, or nearly ten sheaves per minute, just equal to our ordinary work during the whole Fair,) we think should conclusively settle the question of superiority: and we hazard nothing in saying the committee will not deny one of these statements. We may here remark, that we consider the published report imperfect, and that justice to the committee as well as ourselves, requires the publication of these facts.

At the Fair of the Michigan State Agricultural Society, in 1850, we received Twenty Dollars for the largest and best collection of Implements; also, a Diploma for our Horse Power. The Premium of Ten Dollars being awarded the Wheelers' Power.

In 1851, at the same Society's Annual Fair, we were again in competition with the same Power, and were unanimously awarded its Highest and only Premium, being Ten Dollars and Diploma. (and this, too, at the hands of a committee, the majority owning and using the competing Powers on their farms,) for superior construction, efficiency, and ease for team—thus redeeming its reputation from the effects of the adverse decision of the previous year.

At the Fair of the Ohio State Board of Agriculture, in 1850, we were again in competition with the Wheeler Power; and each received a like Discretionary Premium, being a Silver Medal and Diploma—the First and only Premium being awarded to a Lever Power—Taplin's Patent.

At the Fair of the same Board of Agriculture, in 1851, a like competition, with similar result—the only Premium being awarded to the same Lever Power as before.

At the Fair of the State Agricultural Society of Pennsylvania, in 1851, (being their first Fair,) we were awarded a Diploma for superior Rail Road Power—the First and only Premium being awarded to a Rack and Pinion Railway Power made within that State, which was more perfectly fitted and finished in all its running parts than any similar implement ever publicly exhibited, working with the least possible friction—while our own was made as usual, and never used for threshing twenty bushels of grain before being exhibited at this Fair. We shall again try our chance the coming season, and hope to succeed in sustaining the good name there which it enjoys elsewhere.

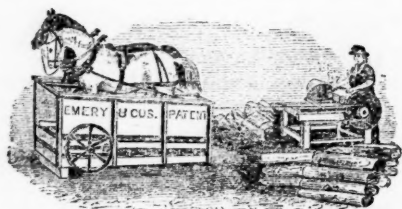
At the Fair of the American Institute, in 1851, we were awarded the only Premium, their "Gold Medal," for our Power, competing with others.

At the Provincial Fair held at Niagara (Canada West) in 1850, we were awarded a gratuity of Ten Dollars and a Diploma for our Power, on exhibition with the Wheelers and others—the First Premium being awarded out of the Provinces, but to a manufacturer in Montreal.

At the same Provincial Fair, in 1851, we did not compete at all—the Wheeler Power alone being exhibited from the States.

Our Power has also been exhibited at nearly all the County Fairs of this and several other States, during the past two years, and in no case where they have been entered for competition and a premium awarded to any one, have ours failed to receive the award; while numerous premiums and awards have been received wherever they have been exhibited.





**EMERY & COMPANY,**  
Sole Manufacturers for the United States,  
OF THE  
**New-York State Agricultural Society's**  
FIRST PREMIUM

**RAILROAD HORSE POWER,**

Patented by H. L. EMERY, February 24, 1852.

Manufactory, on Hamilton, Liberty and Union Streets; Warehouse  
and Sale Rooms, Nos. 399 and 371 Broadway,

ALBANY, N. Y.

THE above Horse Powers have been awarded the highest Premiums at the Fairs of the New-York State Agricultural Society in 1850, and again in 1851; also, the highest Premium at the Michigan State Fair, at Detroit, Mich., in September, 1851, where a majority of the Committee owned and were using Wheelers' Powers on their farms, having purchased them previous to seeing our own; also a Gold Medal at the American Institute in 1851. It was also exhibited at the State Fairs of Ohio, Maryland, and Pennsylvania, and received the highest awards which could be given by the rules of their Societies. In every case, it has been in competition with all endless chain Powers of any note in this country.

Over SIX HUNDRED sets of the above Powers were sold and put in use from June to January last, not one being returned or failed.

To enable the public to distinguish the above Horse Power from all others, we here show its principal, and most important parts, by diagrams and references—beside like diagrams and references of the Rack and Pinion Power, as made by ourselves, Wheelers, and others; and also the Rack and Pinion with epicycloidal teeth, which has long been successfully used in this vicinity, and which, with our recent improvements, in its adoption and application to our Horse Power machinery, places it the first on the list of Rack and Pinion Powers.

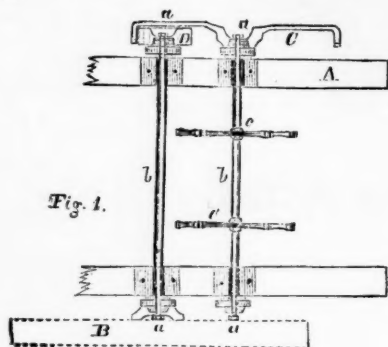


Fig. 1.



Fig. 2.

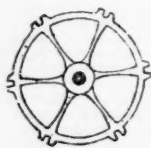


Fig. 4.

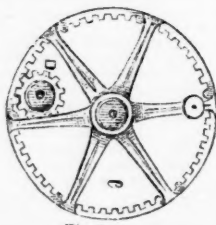


Fig. 3.

Top view of the Running Gear, and a portion of the frame work of H. L. EMERY'S Patent Changeable Railroad Horse Power.

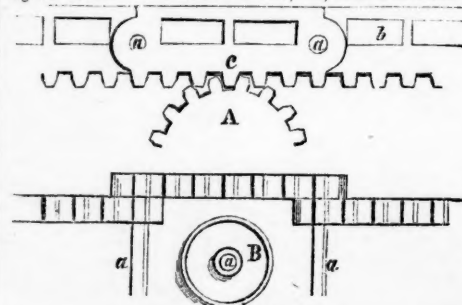
Fig. 1. A. A.—Main sills or timbers of the power supporting the shafts.  
B.—Band pulley upon one of the shafts.  
D.—Pinion, or small gear, upon the same shaft with pulley.

C.—Converge or internal gear upon the main shaft, and working into and over the pinion.  
b.b.—Main and counter shafts of power.  
c.c.—Reels upon the main shaft, which support the endless flooring in its circuit, and carry the shaft.  
a.a.a.—Couplings upon the ends of the shafts, fitting all the pulleys and gears.

Fig. 2. Shows a side and edge view, (enlarged,) of the couplings.

Fig. 3. Side view of converge or internal gear and pinion.

Fig. 4. Side view of one of the two reels, c.c., on the main shaft.

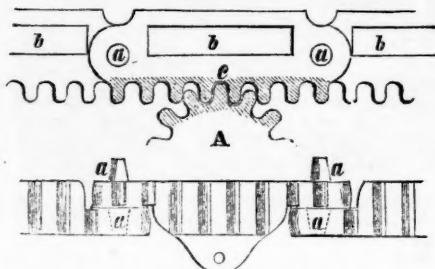


Common Rack and Pinion Power, as manufactured by ourselves, Wheelers and others.

B.—Side view of one of the 72 (or 36 on each side) small truck or friction wheels, which traverse with the endless flooring—being about 3 1/2 inches diameter.

C.—Side view of one of the 72 (or 36 on each side) links or segments of the chain, each of which are six inches long, as seen connected with others. a.a.a.—The eyes of the links and small rods crossing the power and extending through the links, and far enough outside to receive the small trucks.

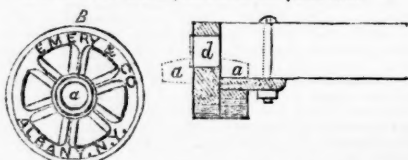
A.—Side view of a section of one of the pinions or small cog wheels, two of which are placed upon the main shaft, and receive the motion and force from the cogs on the links of the chain. This pinion is about four and a half inches diameter, and the band pulley is used upon the same shaft, which for threshing, is four feet diameter. The lower view represents the teeth or cogs, as seen with links inverted.



Emery's Improved Patent Rack and Pinion Power, with cycloidal teeth.

c.—Shows a side view of one of the links or sections of the chain, of which there are but sixty, or thirty on a side, and are each seven inches long; every alternate link is cast with dovetails, a.a.a.a.a., projecting each side; those on the inside connect with the other links, while those on the outside receive the truck wheels, thus avoiding the necessity of the small shafts, and expense of fitting up. The eyes of the links and truck wheels are cast upon steel chills—making a perfect, and hard smooth surface, which will not wear or break—while the dovetails are sufficiently large and strong to withstand more than the cogs themselves.

The lower edge of each link is widened equal to the face of the pinion, and the cogs made to extend the whole width of the pinion, as shown in the lower cut, representing the link inverted, presenting double the strength and driving surface, as shown in the last kind; every alternate link is confined to the plank flooring by a small screw bolt passing through a flange up on the inside of the link, and under the plank itself.



A.—shows a section of the pinion, which is a little larger in diameter than the last—the teeth of which are cycloidal in form—as are those on the links working into them—which is acknow-



article much superior to the ordinary, but what is equally important, the labor required is much less; and by getting the hay put away so rapidly, the risk is very much diminished. We hope our readers will give the plan a fair trial, if heretofore they have adhered to the former laborious mode of preparing this crop. Above all, if they would feed economically, let them build sheds,—the upper part for hay, the lower part for stock; and at least one-half the expense of wintering will be saved.

C. F.

## SHADE TREES.

These hot days make one think of the grateful shade trees, which, by chance, have escaped the destroying axe. We have not the least disposition to be poetical, or to allow our imagination to roam through the winding, sheltered paths of wooded lawns, or the cool retreats of embowered groves; but come right out into the dusty highway and the open fields. There is where you can estimate the value of shade trees.—What a source of true gratulation is it to see the road sides lined with trees, presenting as far as the eye can reach, interminable masses of green foliage, waving responsive to the breeze, and then to cast your eye abroad over the fields, see them well supplied with our rich forest trees, to afford shelter to the flocks and herds, and a resting place for the reapers and binders, where they draw up the bundles of grain for a seat, the while to partake of the "lunch" which the kind hearted ones in-doors, have not forgotten to send, to replenish their exhausted strength.

The Lenawee Co. Agricultural Society gave a premium, last year, to the person who planted the greatest number of shade trees by the road side; and it strikes us as being a most worthy feature, and one that should be universally adopted.

The general practice here, in clearing up our lands, is to cut down and sweep off every thing, leaving our farms as bare as the deserts of Africa. This is a most unwholesome policy. It destroys, or rather it deprives us of the most powerful means of creating and cultivating a taste for the *beautiful*. This any one will acknowledge, when he sees how much trees, add to the *beauty* of farm grounds. It is a matter too much overlooked. A taste for the beautiful should be cultivated, as a source of true happiness and refinement.—And as a pecuniary object, trees should not be neglected. Exposed situations should be protected by a dense plantation. The farm house and out-buildings should always be sheltered on the sides most exposed, by rows of trees. For this purpose, evergreens are the most profitable, as they afford a thorough protection in winter as well as summer, and are richly ornamental.

Every field on the farm should be well supplied with shade trees. No animal can take on fat or yield much milk, which is exposed, day after day, in the open fields to a scorching midsummer sun. Horses suffer extremely in such situations; and were it not for the shelter afforded by the fences, sheep would die.

The maple, oak, elm, ash, hickory and burr-oak, are the most suitable for shade and ornament, among our native trees. The delicate hue and freshness of the

maple and its quality of yielding sugar, makes it a general favorite. The rock-elm is one of the most magnificent of our forest trees. Its huge arms, and massive, pendant foliage, where it grows in the open ground, affording an impenetrable shade, make it worthy a place on the most sightly and prominent parts of the farm.

The *Burr Oak* is but little known, especially as an ornamental or shade tree, except where it grows naturally. It is found on the borders of prairies, and is the main tree on the burr oak plains of this State—lands of a very peculiar formation, and unequalled in richness and fertility. The tree grows to the height of 70 or 80 feet, and generally with a spreading top. The bark is rough, somewhat like the swamp oak. When it grows thriftily, its cream-colored shoots, and dark green, shining leaves, and its regular, rounded top, make it, in our opinion, one of the finest for planting, either for shade or ornament. We hope to see it introduced extensively. We have preserved all that have grown of themselves, on our farm, which is a large number, and design to increase the number by planting.

## MICHIGAN FARMER vs. PRESIDENT MAKING

FARMERS! A great political campaign is now opening. One of two or three unfortunate men is to be elected President of these United States, and two or three parties—more or less—are preparing for the laborious contest. The whole country, for four months to come, will be rocked and tossed on the treacherous billows of a political sea. In the great excitement of politics and strife of parties, will you allow the interests of labor to be forgotten? Politicians have no claims upon the laboring people of this country. For over sixty years we have been a free and independent nation, and now our markets are as unstable as the wind. Under the fostering legislation of one clique, or party, one branch of domestic labor springs up and prospers enormously; another party comes into power, which regards this legislation as obnoxious to the interests of the country, and by a single sweep of legislative power, numbers it among the things before the flood, and thus we are kept in hot water continually, by the unnecessary interference and intermeddling of officious and ignorant politicians, with that which is none of their business.

Now we are for letting politics have what they merit, of our time and money and no more, and attending more strictly to the cultivation and improvement of our minds, and better fitting us for a more intelligent and successful prosecution of our farming profession. The only available means we now have is the agricultural press, and to this we again call the attention of all interested in the spread of light. We ask, with the utmost respect, that the "*Michigan Farmer*" may have that consideration properly its due. We wish all other agricultural papers the same. The more reading, if of the right kind, the more light and better success in farming. We ask for the Farmer as the agricultural organ of the State, the preference from our own people; after that we would like to see as many more of our agricultural papers on the tables of farmers as they can read and afford to pay for. A new Vol. commences with this (July) No. and it is a good time to subscribe. There is more matter in the Farmer now, than in any other agricultural paper in the Union of the same size.

Agents who have sent in Clubs may forward names at Club rates for this Vol. or from January last.

Agents would oblige us much if they would always state whether the names sent are new or old as frequent instances have occurred where a name has been put upon our books at different offices, supposing them to be new subscribers.

## TWO PICTURES OF A FARMER'S HOME.

Major Patrick in his address before the Jefferson Co., (N. Y.) Agricultural Society, draws the following truthful portrait of country life, as too often seen, the result of a false notion as to the manner of spending our lives at our own firesides. His advice we regard as most excellent. If you want to make your children Turks and set like a cat in a strange garret, then keep them out of the parlor except when you have company.

An industrious pair, some twenty or thirty years ago, commenced the world with strong hands, stout hearts, robust health, and steady habits. By the blessing of Heaven their industry has been rewarded with plenty and their labors have been crowned with success. The dense forest has given place to stately orchards of fruit, and fertile fields, and waving meadows, and verdant pastures, covered with the evidences of worldly prosperity. The log cabin is gone, and in its stead a fair white house, two stories, and a wing with a kitchen in the rear, flanked by barns, and cribs, and granaries, and dairy houses.

But take a nearer view. Ha! what means this mighty crop of unmown thistles bordering the road? For what market is that still mightier crop of pig-weed, dock and nettles destined that fills up the space *they call* the "garden?" And look too at those wide, unsightly thickets of elm, and sumach, and briars, and chokeberry, that mark the lines of every fence!

Approach the house, built in the road to be convenient, and save land! Two stories and a wing, and every blind shut close as a miser's fist, without a tree, or shrub, or flower to break the air of barrenness and desolation around it. There it stands, white, glaring and ghastly as a pyramid of bones in the desert. Mount the unfrequented door-stone, grown over with vile weeds, and knock till your knuckles are sore. It is a beautiful, moonlight, October evening; and as you stand upon that stone, a ringing laugh comes from the rear, and satisfies you that somebody lives there. Pass now around to the rear; but hold your nose when you come within range of the pigery, and have care that you don't get swamped in the neighborhood of the sink-spout. Enter the kitchen.—Ha! they are all alive, and here they live, all together. The kitchen is the kitchen, the dining room, the sitting room, the room of all work. Here father sits with his hat on, and in his shirt sleeves. Around him are his boys and hired men, some with hats and some with coats, and some with neither. The boys are busy shelling corn for sump; the hired men are scraping whip stocks and whittling bow pins, throwing every now and then a sheep's eye and a jest at the girls, who, with their mother, are *doing up* the house-work. The younger fry are building cob-houses, parching corn, and burning their fingers. Not a book is to be seen, though the winter school has commenced, and the master is going to board there. Privacy is a word of unknown meaning in that family; and if a son or daughter should borrow a book, it would be almost impossible to read it in that room; and on no occasion is the front house opened, except when "company come to spend the afternoon," or when things are brushed and dusted and "set to rights."

Yet these are as honest as worthy and kind hearted people as you will find anywhere, and are *studying out* some way of getting their younger children into a better position than they themselves occupy. They are in easy circumstances, owe nothing, and have money loaned on bond and mortgage. After much consultation, a son is placed at school that he may be fitted to go into a store, or possibly an office, to study a *profession*, and a daughter is sent away to learn books, and manners, and *gentility*.—On this son or daughter, or both, the hard earnings of years are lavished; and they are reared up in the belief, that whatever snacks of the country is vulgar—that the farmer is *necessarily* ill-bred, and his calling ignoble.

Now, will any one say that this picture is overdrawn? I think not. But let us see if there is not a ready way to change the whole expression and character of the picture almost without cost or trouble. I would point out an easier, happier, and more economical way of educating those children far more thoroughly, while at the same time

the minds of the parents are expanded, they are prepared to enjoy, in the society of their educated children, the fruits of their own early industry.

"First let the front of the house be trown open, and the most convenient, agreeable, and pleasant in it be selected as a family room. Let its doors be ever open; and when the work of the kitchen is completed, let mother and daughters be found with their appropriate work. Let it be the room where the family altar is erected, on which the father offers the morning and evening sacrifice. Let it be consecrated to neatness, purity and truth. Let no hat ever be seen in that room on the head of its owner; let no coatless individual be permitted to enter it. If father's head is bald—and some there are in that predicament—his daughter will be proud to see his temples covered by the neat graceful silken cap, that her hands have fashioned for him. If the coat he wears by day is too heavy for the evening, calicoes are cheap, and so is cotton wadding. A few shillings placed in that daughter's hands, insure him the most comfortable wrapper in the world; and if his boots are hard, and the nails cut mother's carpet, a bushel of wheat once in three years will keep him in slippers of the easiest kind.—Let that table, which has always stood under the looking glass, against the wall be wheeled into the room, its leaves raised, and plenty of useful not ornamental, books and periodicals be placed upon it. When evening comes, bring on the lights, and plenty of them, for sons and daughters, all who can—will be most willingly students. They will read, they will learn, they will discuss the subject of studies with each other; and parents will often be as much instructed as their children. The well conducted agricultural journals of our day, throw a flood of light upon the science and practice of agriculture; while such a work as Downing's Landscape Gardening, laid one year on that centre-table will show its effects to every passer-by, for with books and studies like these, pure taste is born and grows most vigorously."

For the Michigan Farmer.

## A NEW DEPARTMENT.

MR. C. BETTS,

Dear Sir:—I think if you would devote a small space each month, printed in bold type, with the division between the syllables (if not too much labor) to such children as a just able to read easy words, and be interested in tales of every day life, it would add much to the popularity of your already interesting paper.

Your object seems to be to place in the family, a paper of interest to every member of that household, and the "Farmer" is that paper with this one exception. Add this, and I think it would receive the approbation of three out of every four subscribers. Children have ever inquiring minds, and this disposition should be gratified if we would have them intelligent; and grow up to be ornaments in society. They are to be the future men and women, and if they are neglected as children, then will their future point with an unerring significance to that neglect. But every true parent is interested more in the culture of the immortal minds that are entrusted to their care, than in the culture of the earth that brings them the rich harvest of golden grains and melting, blushing fruits. Those that have felt the reward of this cultivation can best appreciate it, yet how far beyond these are the rich fruits that are ripening for eternity.

Yours, &c.,

E. P. B.

[My dearest friend, we already have at least four departments in the Farmer, and we sometimes think they are more trouble than they are worth. We would like to please the children and assist in directing their opening minds in the ways of virtue and intelligence, but there are so many publications now in circulation, devoted to the wants of children in these respects, which are very ably sustained, employing some of the most highly refined minds in the country, that we do not think it would be worth our while to devote much space to them. We will publish occasionally a *well written* article for children—

shall be very glad to do so, but to have a set page for them we cannot do it.

Those who want a work for children will do well to send to Fowlers & Wells, N. Y., for "The Student," an excellent little work, at one dollar a year.

We shall endeavor to make the Farmer a work that will receive the approbation of the *whole* *four* of your committee. On all subjects connected with rural life and labor a great and increasing interest is now felt, and we intend to keep our readers posted up in all matters of improvement relating thereto, in a manner that we trust will not only please but instruct.]

### THE WAY TO FORTUNE.

Let no poor boy after reading the following interesting fact, ever despair of making a respectable living.

A gentleman was once walking down one of the streets of H——, when a beggar loudly craved for "a few coppers for a night's lodging." The gentleman looked earnestly at the poor man, and inquired, "Why do you not work?—you should be ashamed of begging."

"Oh, sir, I do not know where to get employment."

"Nonsense," said the gentleman, "you can work if you will."

"Now listen to me. I was once a beggar like you. A gentleman gave me a crown piece, and said to me: 'Work and don't beg; God helps them who help themselves.' I immediately left P——, and got out of the way of my old companions. I remembered the advice given me by my mother before she died, and I began to pray to God to keep me from sin, and give me his help day by day. I went round to the houses in the country places, and with part of my five shillings bought old rags. These I carried to the paper mills and sold them at a profit. I was always willing to give a fair price for things I bought, and did not try to sell them for more than I thought they were worth. I determined to be honest, and God prospered me. My purchases and profits became larger and now I have more than ten thou- and crown pieces that I can call my own. One great thing that has contributed to my success is this, I have kept from drinking and using tobacco."

As the gentleman spoke, he took out his purse, and drew from it a five shilling piece, and handing it to the astonished beggar, he said, "Now you have the same chance of getting on in the world as I had. Go and work, and never let me see you begging again. If I do, I will hand you over to the police."

Years passed away. The gentleman had forgotten the circumstance, until one day when traveling through P——, he entered a respectable looking bookseller's shop in order to purchase some books that he wanted.

He had not been many minutes in conversation with the bookseller, before the latter, looked eagerly at his customer, inquired, "Sir, are you not the gentleman who, several years ago, gave a five shilling piece to a poor beggar at the end of this street?"

"Yes! I remember it well."

"Then sir, this house, this well stocked shop, is the fruit of that five shilling piece." Tears of gratitude trickled down his cheeks as he introduced the gentleman to his happy wife and children. He was regarded as their benefactor. When gathered round the table to partake of a cup of tea, the bookseller recounted his history from the above eventful day. It was very similar to that of the welcomed visitor. By industry, honesty, and dependence on God's help, he had risen step by step from buying rags, to selling papers and tracks in the streets, then to keep an old book shop, and ultimately to be the owner of one of the best circulating libraries in the place. Before the happy party separated, the large old family Bible was brought out, of which a Psalm of thanksgiving was read, and then all bent around the family altar.

Words could not express the feelings of those who formed that group. For some moments, silence intermingled with subdued sobs, evinced the gratitude to the Almighty Disposer of all events, which was ascending to heaven.

When they rose and bid each other farewell, the bookseller said: "Thank God, I have found your words to be true. 'God helps those who help themselves. It is better to work than to beg.'"—*Exchange.*

### VIEWS RESPECTING THE SOURCE OF LIGHT

James Naysmith, F. R. A. S., inventor of the Steam Hammer, an astronomer of no mean fame, and a man of splendid abilities, has recently published an article in the Edinburgh Philosophical Journal, explaining some of his views on the "Source of Light," which are both novel and interesting. He states that he has examined, for a number of years, the remarkable features which, from time to time, occur on the sun's surface, and whatever the nature of solar light may be, the source of it appears to result from an action induced on the exterior surface of the solar sphere." Impressed with this view he was led to conclude that the true source of the latent elements of light resided not in the sun but in space itself, and that the sun's duty is to act as an agent for the bringing forth into vivid existence its due portion of the luminous elements, which, he supposes, is diffused throughout the boundless regions of space, and is perfectly inexhaustible. Reasoning upon this basis, he concludes that the element of light may not be equally diffused throughout the regions of space, and if this is so, it is easy to account for the glacial period, which, as geologists say, once existed on this earth, and which they account for, by boulders in Long Island, drift grooves in rocks, where no icebergs are now seen, nor glaciers either.

He says that there perhaps was a time when our sun in its course through the stellar universe, passed through a region of space, where the light yielding element was deficient, and in which case his brilliancy would have suffered awhile, and an arctic climate in consequence spread from the poles towards the equator of our earth: the glacial handwriting on the walls of our mountains and ravines, he asserts, is unquestionable evidence of this. He believes that his idea of this source of light, agreed with the Mosaic account of the creation.—*Scientific American.*

WOOL.—The Jonesville Telegraph says:

"Our streets are very 'woolly' this week and the competition among the buyers quite brisk. Although the prices are not quite so high as last year, yet immense quantities will be brought into market. Prices range from 25 to 35 cts  $\frac{3}{4}$  lb. We notice a great deal of dirty, damp wool in market, such wool is never worth as much as when well cleaned and dry. If farmers knew what was to their interest they would bestow more care upon their wool. Buyers gladly pay more for clean wool than for dirty, although each be of equal fineness."

### SOWING CORN FOR FODDER.

We must again call the attention of our readers to the importance of sowing Corn for feeding. Those who have not pasture for teams and milch cows, will find this the best substitute they can avail themselves of. Indeed, it is better than common pastures, and every farmer ought to grow a patch near at hand to feed teams when in a hurry, and to give the milch cows when other supplies fail. Trowbridge & Co., milk-men here, who last year had the precaution to sow a small patch to corn, were enabled to keep their cows in milk the season through, and supply their customers; while others, who depended on pastures alone, failed. The thick, strong growth of the corn soon covers the ground completely, and acts as a mulch, shading the ground and preventing the escape of moisture.



## FISHERIES OF MICHIGAN.

Few persons, not directly interested in the business, are aware of the exceeding abundance of fine fish contained in the Detroit river and the upper lakes. Of the exact value of the fish caught, used in the State, and exported from Michigan, annually, we can form no opinion. By a singular oversight, this branch of commerce is entirely overlooked in the statistical returns made by the Secretary of State; and we are not yet in possession of the census for 1850. The census for the year 1840, gives 16,535 barrels of "pickled fish," as the amount then put up, worth, at present prices, about \$132,280; and as the number of white fisheries have probably more than doubled, and as a much larger quantity of other fish are now salted, we may estimate the annual value of this branch of commerce, including barrels and salt, at more than a quarter of a million of dollars. This is exclusive of a considerable amount sold fresh in the Detroit market, or consumed by those who live near the water.

In 1850, according to a carefully prepared table, lately published in the New-York Tribune, the gross value of the product for one year of all the Copper and Iron mines on Lake Superior, was \$423,960; so that our fisheries rank second in those branches of native productions not directly connected with agriculture or the forests.

Familiar as the white fisheries are to those who live on the Detroit river, there are undoubtedly many in the State and elsewhere, who are unacquainted with the details.—The white fish is of a migratory character, the depths of Lake Erie being apparently its home. In the fall of the year, in September or October, they ascend the Detroit river in immense but detached schools, for the purpose of spawning. Till within a few years, they first appeared and were caught in the channel between Canada and Grosse Isle; but we understand that lately they have been taken as far eastward as Cleveland; and some find their way into the Maumee river. On both sides of the eastern branch of the Detroit river, numerous fisheries are established; the larger ones, in a good season, each catching from 50,000 to 70,000 fish; and the smaller or worse situated fisheries in proportion. The right to fish, is considered very valuable. Two years ago, the large sum of \$2,000 was paid for a fishery on Grosse Isle, consisting merely of a piece of wet marsh, and the water to the channel bank; and some could not be purchased for a very much larger sum. The Messrs. Clark, the most enterprising fishermen of the lakes, have converted some sedgy islands, a few miles above Grosse Isle, into fisheries, where they sweep a large extent of water, with proportionate success. And thus, on every available situation, high above Detroit, fisheries are located. The time for catching, only lasts about a month; and the white fish is not again seen in the lower waters, till the next season comes round. Whether the old fish remain around Mackinaw and Sault St. Marie, and only the fry descend, or whether they all return under the ice, is yet, we believe, an undiscovered mystery; but there appears to be no diminution in the gross quantity of fish, during the last fifty years, though each fisherman may catch a smaller number than when the business was confined to a few.

A busy time it is, indeed, when the white fish first appear. The French Canadians manifest a peculiar ability and hardihood in this business, and are chiefly engaged in it. A horse-wheel is used for pulling in the seine, which is often a quarter of a mile long, and 20 feet deep; and in large establishments, such as that of the Hon. Thomas Lewis, on Grosse Isle, and which is also one of the oldest, two horse-wheels are used, with wharf, packing houses, a house for the fishermen to occupy, &c.; while two sets of hands, to work incessantly day and night, are employed. The seine is carried out in a large boat, and immediately again hauled in; the fish are directly cleaned, packed and salted; and once begun, the hurry never ceases until the last fish has passed.

Together with the white fish, still larger schools of herring appear. This herring, a very beautiful silvery fish, is somewhat longer and heavier than those caught in the Potomac; and if they were pickled in the same manner, or smoked like the Nova Scotia herring, we have no doubt but that they would be equally good; but amidst

the profusion of food, and the quantity of more favorite fresh fish with which a kind Providence supplies us, they are rarely fished for, or used in any shape. The day, however, will come when a dense population and costly provisions will render them of great value. Around Mackinaw, Sault St. Marie, and the south end of Lake Superior, the white fish are resident, and may be caught at any season; but their flavor is supposed to be coarser, and they do not bear quite so high a mercantile value. There also the lake trout, and siscowit, are taken in large quantities, salted, and exported to Ohio, and the States lying on the Mississippi.

We conclude, with a list of the Fish usually caught in the Detroit river. Those marked with an asterisk are (\*) not generally considered good to eat:

1. Sucker (two species); 2. Mullett; 3. White Bass; 4. Rock Bass; 5. Black Bass; 6. Roach; 7. Pike; 8. Pickerell; 9. Muskegon; 10. Sun Fish; 11. Buffalo, (or Lake Shad); 12. Perch; 13. Gar Fish; 14. Bullpout; 15. Sheephead; 16. Catfish, (three species); 17. Stone-carrier; 18. Dogfish; 19. White fish; 20. Herring; 21. Alewife; 22. Half-moon fish; 23. Lamprey Eel\* of the Fisherman's (probably of the genus *Myxine*) of Linnaeus; 24. Lake Trout, (occasionally taken); 25. Shiners; 26. Minnows; 27. Sturgeon. Besides these, there is a large variety of small fish, chiefly interesting to the naturalist, some of which have only lately been described and named, and undoubtedly many are yet unknown to science. The writer, not long since, procured a specimen of a fish, nearly a foot long, also unknown, caught on a night line; and it is believed that other large but scarce fish may yet be found here. C. F.

For the Michigan Farmer.

## IMPORTANCE OF AGRICULTURE.

In my remarks in the April No. of the "Farmer," I alluded to the true principles of Agriculture as being very imperfectly understood. This is to a great extent but too true, although there are exceptions to all general rules and so with this. There are numbers, whose minds are awake to the importance of a thorough knowledge of the elements necessary for the full development of plants, their presence in soils, the best means for supplying deficiencies where they occur, with their combinations, requisite to supply the wants of the varied crops to be produced. This knowledge is not to be obtained through the medium of antiquated customs and traditions of by-gone ages, but by leaving these customs and habits to those who choose to walk in darkness, who are content to follow on in the footsteps of their fore-fathers, like the man who would carry his grist to mill in one end of the bag and a stone in the other, and taking science for their guide, stand forth in the dawning of that light which is ultimately destined to guide the farmer in his operations with as much precision as the needle directs the mariner through the trackless deep to his destined port. I may by some, be thought visionary, but such is my faith in the progressive spirit of the age, that a subject fraught with such incalculable benefits to the human race, will never be abandoned until the limit of human investigation has been reached. But it will require time for the accomplishment of such a vast object. Prejudices and habits of long standing will have to be removed; this will require patience and perseverance; the minds of men must undergo complete change; they must become acquainted with the nature and composition of soils.—Here Geology steps in and offers to aid them in their investigations. It teaches them that soils are formed by the intimate mixture of the debris of rocks, in different conditions; it teaches them also that soils contain the organic as well as inorganic constituents of all vegetable life. The organic portion of plants are Carbon, Hydrogen, Oxygen and Nitrogen; the inorganic are silica, lime, potash, soda, magnesia, chlorine, sulphur, phosphorus, magnesia and iron. These are all absolutely necessary for the growth of cultivated crops. But there can be no very material improvement in husbandry without a careful and diligent study of the laws of nature and a strict compliance with their functions and operations. Plants



differ in their composition, some requiring a greater proportion of one element than another; hence the necessity of a knowledge of chemistry in order to understand the proportion of organic or inorganic elements that enter into the composition of the different kinds of grains and grasses, as well as root crops, &c. When he comes to understand the true composition of his soil, the wants of the crop he wishes to grow, the farmer will be able to supply any deficiency that may happen to exist, with as much precision as a problem can be solved by mathematics. All soils are not equally fertile in all the elements of nutrition; hence the importance of a thorough knowledge of science, &c.

H. B.

*Burr Oak.*

For the Michigan Farmer.

## TO CORRESPONDENTS.—HAYING.

PLYMOUTH, June 2, 1852.

## FRIEND BETTS,—

What has become of your numerous correspondents? When the Farmer comes to hand, nothing affords so much pleasure as to read the practical and intelligent views given by your correspondents from the various parts of our young and flourishing State. It certainly affords an intellectual feast to me—it creates a brotherly feeling towards the household of the great Agricultural family.—The “Farmer,” is like an old friend, coming on a visit to exchange ideas, and give the news of the day, and awaken the mind to thought and action. Knowledge is made of ideas, evolved by the friction of mind upon mind, and demonstrated by practical experiment; hence it is seldom that anything is written on the practical operations of Agriculture that is entirely useless.

Come on, brother farmers, commit a few of your thoughts and experiments to writing, and send them to the Farmer.

The Ladies' Department has been very entertaining. Ladies too, a great deal depends on you, to give energy and encouragement to one of the most innocent and noblest classes in life—AGRICULTURE.

Come, then, let all unitedly sustain our home paper, both with means to give an Editor a living support, and practical communications for the edification of all, and if Friend Isham has not been swallowed up by the Arabs, we can occasionally take a glance over the Old World.

The cost of the Farmer is about the price of a bushel of wheat, which can be saved in an hour's time with care, and the benefit during a year is incalculable, both for instruction and for its society—without which a man would become a stranger in his own land. We may count that day lost, whose low descending sun sees by our hands no worthy action done. And should we not happen to agree in every particular, the mode may be varied in our experiments, by slight causes arising from locality, soil, season, noxious substances, or climate. Therefore, all the circumstances and conditions should be taken into account before condemnation be passed.

Mr. Editor—as haying time is soon coming, a word on that subject, for the purpose of eliciting an exchange of views.

The cutting and curing of hay is all important in this latitude, where the innocent animals entrusted to our care and protection, from the chilling blasts of winter, are dependent upon the skill and exertions of man for the preservation of their lives.

In this State there are three kinds of hay, viz: clover, timothy and marsh grass. Of these, the clover is the most difficult to cure or make—and several modes have been practised in curing; among which the most successful in all kinds of weather, is to cut or mow when about one-half out of blossom, and let it wilt; then put up in well trimmed tumbles, thus to remain till stacked or housed; if stacked, to be top'd out with fine hay; if put in the mow to remain as light as possible without salt, as salt in damp weather draws too much moisture, and frequently does not dissolve, except where the moisture and heat concentrates. By this mode of curing the leaf is not lost by drying and crumbling off, as when shook over the ground often while curing. The tumbles should not be made too large on the ground, but of reasonable height

as to stand erect, and in ordinary good weather will be fit to draw in three days from the mowing. This variety of hay proves injurious generally to horses that labor hard, (but good for sheep and young cattle,) as it, *in a more heated state, or dusty, creates coughs and heaves.* Timothy or herds grass, is generally cut when out of blossom—in the morning, and housed in the afternoon in good weather;—put in well trim'd tumbles over night, and drawn the following day, if well-made. This variety is good for all kinds of stock.

There are several varieties of marsh grass—the broad leaf, the sprangle leaf, blue-joint fowl-meadow, and red-top, all generally preferred for hay, and it should be cut in the month of August, and when well cured, which requires no extra pains, answers very well for horned cattle, but not so good for horses and sheep. The marsh, or natural meadow proved highly beneficial to the early settlers of the great West, and in all coming time will prove the sources of unbounded wealth in the manure they will furnish.

With the highest esteem,

Respectfully and truly

Your friend,

J. SHEARER.

## FRIEND BETTS—

I do not know that in the few lines directed to you on curing clover hay, the mode of operation to be pursued on the day of housing or stacking, was sufficiently definite—which should be as follows:

The tumbles should be cured tolerably well through, before it is drawn, and on the morning of drawing open them to the sun, and they will dry, so as to be in readiness for moving to the place of deposit on the afternoon of the same day.

In all the operation of haying, good judgment is required in cutting and curing Hay, and the clover variety requires most care and attention.

It is expected that many will be in favor of salting hay, and will write on the subject, but I am fully satisfied from some forty years observation and experience, that salt put upon hay, *in the mow or stack*, is of no use, so far as curing and preserving is concerned.

Respectfully and truly yours,

J. SHEARER.

We agree with friend Shearer, exactly in reference to “good judgment,” in curing clover hay. All the directions that were ever written cannot meet every contingency that may arise; and hence, tho' these instructions are invaluable, a farmer must surely have his thoughts about him. Attention to directions by practical, experienced men, and a close watch of the curing process, will soon enable the observing farmer to make clover hay an article that will, in our opinion, turn out more flesh than any other variety of grass.

But he who gets it exactly right the first time trying, is exceedingly *lucky*.

## “ACKNOWLEDGING THE CORN.”

The New York Express says:—The high prices of beef, veal, mutton, butter, potatoes, and other such necessities of life, not only in this great metropolis, but in other cities on the Atlantic, indicate something wrong in the mode of providing for the markets, or the forwarding of things to market. Be the causes of high prices, however, what they may, if the causes be good, more farmers are needed than we have. Agriculture, prices tells us, is under done, and other things are everdone. There are not enough raisers of food properly to supply the devourers.” This is what we call “acknowledging the corn.”

“What things,” asks the Pennsylvanian, “are they to which the Express refers that are overdone? If they are not the agricultural pursuits, certainly it must mean manufactures. While agriculture has been comparatively neglected, manufacture has been fostered and built up. Thousands have been induced by the cry of “protection,” to desert the country and fly to the town, to seek employment, or in some way engage

in manufacturing. And what is the result? Our markets are glutted with goods of every description, which sell at a low price, while the real necessities of life sell at an extravagant rate on account of the small number engaged in producing them."

#### AGRICULTURAL ODE.

This excellent ode was composed for the annual celebration of the Berkshire, (Mass.) Agricultural Society, by William C. Bryant, Esq., who is acknowledged the best of living poets. May his name be long remembered.

Far back in the ages  
The plow with wreaths was crown'd,  
The hands of kings and sages  
Entwin'd the chaplet round;  
'Till men of spoil  
Disdain'd the toil  
By which the world was nourish'd,  
And blood and pillage were the soil  
In which their laurels flourished.  
—Now the world her fault repairs,  
The guilt that stains her story;  
And weeps her crimes amid the cares  
That form'd her earliest glory.

The proud throne shall crumble,  
The diadem shall wane,  
The tribes of earth shall humble  
The pride of those who reign;  
And war shall lay  
His pomp away;  
The fame that heroes cherish,  
The glory earn'd in deadly fray,  
Shall fade, decay, and perish.  
—Honor waits, o'er all the earth,  
Through endless generations,  
The art that calls the harvests forth,  
And feeds the expectant nations.

#### SILK MANUFACTURE.

James Walker, Fryeburgh Island, is informed that we have made the inquiries he refers to. We are glad to hear that "a good annual crop of silk is to be had in the State of Maine," as this business, like many others, has struggled in this country, against adverse fortune, and been counteracted by prejudices not contemplated at its introduction. We hope, and believe, that the day is not distant when the culture of silk will be admitted to be as healthful and pleasing, as it is known to be a useful and profitable business. The cultivation of this luxurious and comfortable article need not interfere with the general productions of the agriculturist. The substitution of mulberry hedges for the usually rude division fences of farms, would be equally cheap, and more useful and ornamental. The worms only require management by females and children, too old or too young for laborious pursuits, and that at a season of the year when the labors of the farm are not the greatest. The reeling of the cocoons can be postponed as a suitable employment for long evenings.

The manufacture of sewing silk has of late been prosperous in this country, and in Putnam's Cyclopaedia of the Useful Arts, we find that there are six manufactories in Tolland Co., Conn., which turn off respectively the following amounts of sewing silk. Vyse & Sons, Welling-ton, 12,000 lbs.; Rixford & Butler, Mansfield, 5,000 lbs.; W. Atwood, 3,700 lbs.; Zalsom, Storrs & Son, 2,000 lbs.; J. & E. Hovey, 1,500 lbs. and Chaffee & Co., 1,090 lbs.—In addition to these there are upwards of a dozen others turning out a large amount annually of manufactured silk, some in Mass., N. Y., N. J., Pa., Ky., &c. The manufactories are mostly supplied by importation, which amounts to millions annually, and yet experience has fully proved that the climate is admirably adapted to the nature and habits of the silk worm and the culture of silk. We do not despair of yet finding Americans the greatest silk

growers in the world. The price, per pound, of the raw silk in New York averages from \$3.50 to \$4.00, and is bought at Mr. John McCrea's, Canal street, Mr. Shapter's, 233 Pearl street, and of Hadden, 61 Pine street.—*Farmer and Mechanic.*

#### TAN BARK FOR MANURE.

That there is an enormous waste of manure in spent tan bark, we have no doubt; but that it is as great as our correspondent makes it, we had no idea. One of the most profitable uses to which this substance might be applied, perhaps, would be in mulching orchards. It would keep the ground shaded, moist, and rich, and the slow decay would give the trees exactly the kind of manure they require. Wood decaying, will make wood living. Another very profitable use of spent tan, is to apply a few shovels full every day to the privy. It not only acts as a deodorizer, but absorbs the liquid portion, and by combination with the animal matter of the contents, it is converted into an unctuous mass of black, rich manure. It may also be used to great advantage as an absorbent of the liquid manure of the stable and yards, and pig pens. In composting, tan may be made a valuable ingredient. Lime is the cheapest and best "chemical preparation" that can be used to correct the acid. To make a compost heap with spent tan, first lay down about one foot deep of tan, and upon this spread three inches of lime, then one foot of stable manure, then another layer of tan, then lime, and so on, till high enough, cover the whole with charcoal dust, dry peat or loamy earth, a few inches deep. If you can get from the tannery any scraps of skins, or oily matter, or if you can procure the carcass of any animal, even a dog, or any animal matter of any kind whatever, whether flesh, blood, skin or hair, bury it in your compost heap. After three months of cold weather, turn your heap, mix and repile, and you will soon learn the value of spent tan for manure.

[The above article we find in the "Plow," in answer to a correspondent. The plan of making compost given, brings to mind the man's *stone soup*, which was made quite palatable by the successive additions of a meat bone, a lump of butter, some salt, pepper, &c.]

Well, we do not like friend Solon's plan; the lime would drive off a large portion of the ammonia of the manure, and thereby destroy its value. A better way, we think, would be to first mix the lime with the tan bark, by which the tannic acid will be neutralized, and this done, there will be little danger of a loss of ammonia, and the lime will still produce a slight fermentation.]

For the Michigan Farmer.

LAMPAS.

MR. EDITOR:

I am inclined to think that what is called in the books, Lampas, (by some called Lampreys, by others Lampers,) is not a disease. I have examined the mouths of many young horses, recently, and all have it without one exception. If it is a disease, why is it universal?—Can any of your readers tell?

COLT.

EFFECTS OF THE POISON OF THE RATTLE-SNAKE ON PLANTS.—Mr. J. H. Salisbury communicated to the American Association, at the Albany meeting, the result of the following experiments, which he made:

He extracted the venom bag from the head of a rattlesnake, and immediately inoculated with the poisonous fluid which it contained, the young shoots of the lilac, horse-chestnuts, and several plants. For sixty hours after the operation no visible effect was produced—soon after, the leaves above the wound, which was very minute, began to wither, and in ninety hours after the inoculation was performed, nearly all the leaves above the incision were withered and dead. In neither case were shoots entirely destroyed; but they lost all their leaves, and put forth new ones only after a lapse of two or three weeks from the introduction of the poison.

## SWINE.

"As dirty as a pig," describes, in most men's vocabulary, their "ne plus ultra" of personal uncleanness. It is a great, but a common error, this, that a hog is naturally and of choice a filthy animal, delighting in a mud-bath, as the greatest of sublimary luxuries; and be-coating himself with mire, as proudly as the veriest dandy would broadcloth himself *a-la-mode*. A hog, if reared in a respectable manner and washed of a Saturday night, with the rest of the children, will do no discredit to his bringing-up, but may chance to shame many of his masters, by the decency of his appearance. Kept clean by an occasional washing, and the privilege of neat apartments for his noon-tide nap and nightly snooze, the hog repays with interest the feed and care bestowed on him. He thrives better thus, than when forced to wallow in the mire—for he seeks the mud-medicated bath, merely to allay the irritation of his skin. If you keep his hide clean, he will no longer need it, and no longer seek it; unless a bad early education prevails over his natural swinish notions of neatness. We have tried thoroughly, the plan of keeping hogs clean, by washing and by good pens and nice litter; and we have found an advantage in it.

"As drunk as a sow," is another proverb, which unjust and ingenious man has invented and perpetuated to keep himself in countenance. "David's sow," is sometimes particularized. Now it is a fact, that may be new to many of our readers, that the hog, in his anatomical structure, his diseases, and in many of his habits, approaches more nearly to man, than any other of our domestic animals. Inasmuch that surgeons, hard run for human subjects whereupon to lecture and demonstrate to their journey-men-sawbones, have frequently selected a pig to occupy the vacant table. Very many of their diseases are identical with our own. And their habits,—their laziness, their omnivorous appetite, their clamorous urgency for kitchen drippings—are certainly very like to those of many of our own kind—we won't specify politicians.—But in the matter of the Maine law, they shame, in their practice, the professions of some of its most wide-mouthed friends. The hog is a "much abused people."

In feeding swine, men should use judgment. A hog wants his meals regularly; or he worries and squeals off an ounce or two of fat. In early youth, when weaned from the maternal teat and up to the age of six months, at least, he should be allowed the largest liberty consistent with circumstances. Exercise expands and develops his frame, and fits it to carry more flesh and fat; and ensures to the pig a good constitution. Having attained a sufficient size, he may be penned and gradually fed more and more; and when once fat should not be allowed to lose a pound. Regularity and repose are now necessary to ensure the most satisfactory state of obesity.

Clover is an excellent fodder for swine. On clover and water alone, a well-bred pig will become a very Daniel Lambert of a pig. Green corn may follow clover; and as fall fades into winter, push in the meal. This is the mode of feeding which we have seen adopted with the most entire success, for large herds; where were no facilities for butter-milk or other swill, that many farmers have in abundance. At the South and West, the swine find their own living; and, "not knowing, can't say," whether their owners would or would not find it to their advantage to have a little more system in their swine-feeding.

The breeds of swine now most valued, at the North, are the Suffolk and the Middlesex. These two are very like in every respect; and after having bred both for many years, we would not give "the toss-up of a copper, for a choice." To be general favorites, they have hardly size enough. Though their early maturity, small consumption of food, and wonderful inclination to fatness, more than compensate, in cash, for their want of size. Suffolk pigs have been slaughtered, at 6 months old, that weighed three hundred and ninety-four pounds. No man need have a finer breed than this. If he wants a bigger breed, let him select one of those Noah's Ark race, that weigh eight hundred dressed (at Methuselah's age,) and try to make a breed by using a full blood Suffolk, Middlesex, or Essex boar. We wonder that no one has imported the

Leicestershires, to gratify this taste for large swine.—*Journal of Agriculture.*

## NUMBER OF PLANTS ON AN ACRE.

There are 43,560 square feet in an acre. The number of plants which may be contained on an acre at a given distance apart may be ascertained by dividing the above number by the square of the number of feet it is desired to have the plants stand apart. Thus, if we wish to plant three feet apart, we will divide 43,560 by 9 the square of three, the distance it is desired to have the plants stand apart. This will give 4,840 plants on an acre.

The following table will give the number of plants on an acre, from one foot up to ten.

Distance apart in feet.	No. of plants.
1	43,560
1½	19,360
2	10,890
2½	6,969
3	4,840
3½	3,556
4	2,722
4½	2,151
5	1,742
6	1,210
7	889
8	680
9	537
10	435

**PRESERVING CURRANTS.**—Now is the time to gather currants for preserving. Pick them from the stems and put in bottles, tightly, and they will keep fresh eight or ten months.

**BLIND TEETH IN HORSES.**—A correspondent of the Albany Cultivator relates a case of a stallion of his becoming blind without any apparent cause. On the horse being examined by a friend, it was found that he had "blind or wolf teeth" which being knocked out the horse soon recovered.

Four years ago the present summer, I had a fine young horse whose sight appeared to be failing gradually from day to day. A white gummy substance exuded from the eye, and I was told by a farrier that he had the "hooks."

Having heard something concerning "blind" teeth, (thanks to the agricultural papers,) I made an examination, and found one that was very dark colored. This, I knew from all accounts was a "wolf" or "blind" tooth. Being near a blacksmith's shop, I obtained a punch and hammer, got a man to hold his hands over the horse's eyes, while by placing the punch against the tooth I knocked it out. The horse soon recovered his sight as well as ever.

The operation does not appear to cause any pain, the tooth coming out very easily.

**TO PREVENT PITTING BY SMALL POX.**—The Editor of the *Plain Solon* Robinson, has lately had the small pox. He says that he was vaccinated once, and it protected him forty-eight years. He thinks it should be repeated. He gives the following recipe to prevent pitting:

"Get from the apothecary, a little vial of stuff called 'liquid cuticle,' and as soon as the pustules are fully formed, apply a little of the liquid with a little brush or feather, to each one. As fast as they get ripe remove the scab and wipe away the matter clean and apply the liquid again. If any of them fill a second time, you must remove the covering and repeat the process. It will smart like fun for a moment, but my word for it, when you recover, you shall not find a mark upon that pretty face of yours to prove you ever had the disease."

# REVIEW OF THE WOOL MARKET.

AND PROSPECTS FOR THE SPRING OF 1852.

WHAT was foretold last Spring has come to pass this—that the high prices would react, and that wool would be as much below its real value now as it was above then. Still the depression cannot be permanent, though the grower may not be enabled to realize as high a price as he ought.

There is now in the hands of the manufacturers a fair supply; and, if the dealers, carry out their plans of combination, there will be no active competition in the country. It is proposed by the large dealers in Philadelphia, New York and Boston, not to send out any agents to purchase wool, but to leave it to the wool dealers and to the speculators to send it forward, and we think they will be able to carry out their plan. In that case it is to be seen how well the farmers will be able to combine. They might do it to a very large extent, and thus save thousands of dollars; but judging from the past, there is little prospect of their doing it. The Wool Depot system has been very successful when properly patronized,—and it may be again.

The prices should range about as follows:

Common to $\frac{1}{4}$ blood.....	26c	30c
$\frac{1}{4}$ to $\frac{3}{4}$ .....	28c	34c
Full blood Merino.....	34c	38c
“ “ Saxon.....	38c	45c
Saxon and Merino, heavy.....	36c	42c
“ “ light.....	38c	45c

These are prices that will be realized in Buffalo. There will not be much if any advance on these prices before fall, and then we shall look for an advance of from 3c to 5c per lb. The wool should not sell below these figures, and there is no good reason why it should go higher at present.—*Wool Grower*.  
May, 1852.

## A TOOL SHOP AND TOOLS.

Every farmer ought to have these. The shop should be situated near the dwelling, so that odd moments about the season of meals, in the time of showers, and rainy days can be employed in performing little jobs that need to be done, such as repairing wagons, sleds, plows, harrows, hay racks, rakes and forks, and hoes which have become loose in the socket, or need new handles. These jobs every farmer needs to have done, and if he has not the tools to do them with, and a place to work, he must get a mechanic, spending as much time, perhaps, as would be required to do the work, besides having to pay for it; or he must let it go undone, which is far oftener the case, and the implement goes to ruin, and enough is lost in this way in a few years to pay for all the needful tools and a good shop. Let us see what would be the cost of a few tools.

One saw,	\$2.00
A Square,	1.25
Jack plane and Jointer,	3.00
Adz,	1.50
Five Augers,	2.75
Some chisels,	2.00
Cold chisel, punch, scratch awl, file & gimlets,	.75
Hammer,	1.00
Drawing knife,	.87 $\frac{1}{2}$

\$15.12 $\frac{1}{2}$

This sum could not be made to pay a better interest in any other way, and with these tools any farmer can do his own repairing, and often make his own implements and fixtures, such as gates, sheds, boxes to feed cattle in, and fit up a thousand conveniences which he would not have about him if he was obliged to employ a mechanic, and which he can now do at times when he cannot do anything else to advantage. The shop need not necessarily be expensive or large; 16 by 12 would answer most purposes. A large door should be made at one corner, which will admit a wagon or sleigh for repairs. In this house could be de-

posited all the implements of the farm, where they would be preserved from the weather and exposure to the sun, and if they need repairing it can be done at any leisure time. Indeed, the advantages of having a place to work and a few tools to work with, are quite sufficient, yearly, to balance the expense of tools and house. No one will doubt this after having tried it.

## DORKING FOWLS.

MARSHALL, June 14, 1852.

DEAR SIR:

In my communication to the Farmer of last month, you have, I find, made a misprint, you should have made it 16s per pair, instead of 6s (for no one would ever think of buying Dorkings for the latter price.

Your Ob't Serv't,  
GEO. HENTIG.

## CABBAGES.

The cabbage has lately been chemically examined, in consequence of the failure of the potato, with a view to its substitution for that root. It is found to be richer in muscle-forming matter than any crop we grow. It contains more fibrin or gluten, of which substance the muscles are made, and hence is richer in the material essential to the health, growth and strength of the animal. Wheat contains about 12 per cent. of it, beans 25 per cent., but dried cabbage contains from 30 to 40 per cent. of this all important material, of which the principal mass of the animal structure is built.

An acre of land will produce 40 tons of cabbage; one acre of 49 tons of drum head cabbage will yield 1500 lbs. of gluten; one acre of Swedish turnips will produce about 30 tons, which will yield 400 lbs. of gluten; one acre of 22 bushels of wheat will yield 200 lbs. of gluten; one acre of 12 tons of potatoes will yield 550 lbs. of gluten. Here is the variation in our general crops, as to the amount of this gluten, this special kind of nourishment, this sustaining principle, which accounts for the preference given by experienced farmers to the cabbage as food for stock and milch cows.

The cabbage flourishes best in a moist, rich soil, such as reclaimed swamps; it is more hardy than the turnip in incipient growth; and at a stage when the whole fields of turnips are liable to be swept off by the fly, cabbage plants enough to set an acre can be effectively protected under a few panes of glass, or a yard or two of gauze in a frame in the garden.

It is best for those farmers who plant cabbages, to raise the plant from the seed carefully in their gardens, in beds like onions, and then transplant the sprouts, when about six inches high, to the field.

In the early stage of growth the cabbage requires careful cultivation, most of which, however, may be done with the plow and horse hoe; as soon as the leaves expand and shade the ground, weeds are effectively prevented from growing enough to injure the crop or propagate their seed. This leaves the field in as fine condition for the next crop as could be desired.

Cabbage roots should have plenty of room to shoot away down. The ground for them should be deeply spaded in a garden, and ploughed in a field.

Any rich compost or well rotted manure is good for cabbages; course or unfermented manure is not good. Ashes, Plaster of Paris, bone dust, poudrette, and a little salt will be found beneficial; but above all, if our farmers could save the urine of the stable and apply that, mixed with two-thirds of rain during a shower, just on the top of the ground, they would find the cabbages grow to a very large size, and with firm heads. This plan of manuring has been long practiced by the Dutch, English and Scotch gardeners.—*Scientific American*.

Plants decay most rapidly under the action of oxygen



## THE SOIL.

An acre of soil one inch in depth weighs about 100 tons.

The roots of clover descend from 20 to 30 inches in search of their appropriate aliment, and I have traced them to a greater depth.

By estimating the mass of earth to be only 20 inches as available for agricultural purposes, we have 2,000 tons of soil and sub-soil in an acre. Now, so small an amount of gypsum as 50 pounds has added over 1,000 to the clover hay grown upon an acre, and 100 pounds have increased the crop more than 2000 pounds.

Where did the matter come from that formed this immense gain on the weight of the harvest. One hundred pounds of plaster of Paris really contains a fraction less than 80 of lime and oil of vitriol, the other 20 being what is called "water of crystallization." As gypsum works with marked effect on limestone soil in Western New York, where the use of lime alone does no good whatever, I am induced to regard the sulphur in this fertilizer as the element that really adds so largely to the growth of vegetation. Doubtless it will appear incredulous to you, that 18½ lbs. of available sulphur in 100 of gypsum, should cause the organization of nearly 960 of carbon, 800 of the elements of water, and 50 of nitrogen, attended by the extraction from the soil of about 150 pounds of incombustible soluble salts. Whatever effect the sulphate of lime may have on the growth of a ton of dry clover, the above is not far from its composition. Clover is a plant that contains a great deal of sulphur; and salts having this mineral as one of their constituents, are extremely liable to be dissolved from out of the surface soil by tillage and cropping. Thus when sulphuric acid combines with magnesia, it forms glauber salts; with alumina and potash it forms alum; with iron, copperas;—and with lime, gypsum. Except in the last, all these salts are well-known for their solution in water, and it is obvious that they do not, as a general thing, abound in unmanured cultivated land. So long as the sulphuric acid lasts from its combination with iron, either as a sulphate or sulphate, or with alumina, the basis of all clay, liming will suffice to form gypsum in the soil; but when the sulphur is consumed, or nearly so, then gypsum, not lime, must be added to the soil. Similar remarks will apply to the use of bone dust, or burnt bones and lime.—So long as phosphoric acid exists in the surface of the earth, in connection with alumina and iron, the application of simple lime will suffice to form bone earth, but when this bone is measurably consumed, then bone dust, guano and phosphorus, in some other manures, must be applied to impoverished land to improve it.—*Dr. Lee's Address.*

## SHRINKAGE OF MEAT.

The following article by some mysterious means got mixed with some loose papers and has been overlooked. It should have been published long ago.

CHARLES BETTS, Esq.

DEAR SIR:—I have noticed an article, going the round of the papers, in relation to fattening pork; which I think takes, in some respects at least, incorrect views of the matter. For instance, the writer states, "In boiling our pork, bacon and corned beef the consumers complain of its great shrinkage, by reason of the fat separating from the mass and floating at the top of the pot."

Further on, "now they tell me that this difficulty may be overcome if our people would, whilst fattening the hog feed him about one pint of common field peas per day," and then, "Pork, the produce of some of the Eastern States, is quite firm, peas being more freely used than with us." Now that the shrinkage complained of is a drawback, I am not disposed to deny, but that it can be prevented by feeding a "pint of peas per day," I think is more than doubtful.

It is well known that a large portion exported from Indiana and the West generally, is driven to the different markets, where it is slaughtered and packed,

large droves of hogs are driven, often a distance that requires from one to two or more weeks, and then huddled together in large numbers, where they are but poorly attended to, until their turn comes to be butchered. Now it is certain, that in this time there has been no gain but, in most cases a decided falling off in flesh, and I am inclined to believe it is this falling off that causes the shrinkage complained of; and I think what is said of the superior firmness of the eastern pork is strong confirmation on this point. Whatever the cause may be, the effect is highly prejudicial to the interest of the west, and any experiments that satisfactorily explain the cause, and point out a sure remedy, whether it be feeding peas, killing in the new of the Moon, or what, I think better than either, to never butcher hogs that are falling away, will deserve the thanks of the entire west.

An old friend of mine and one who usually pays but little attention to the signs, says that well fattened pork, whether made of corn, peas, or potatoes, will always shrink more or less in cooking, if killed after the full moon, but not when killed in the new, or before the full. Although this appears rather whimsical it may be worth a little attention from those interested. The person alluded to, says he has kept a house near a half century and never had, or knew of any well fed pork that was butchered between the first quarter and full of the moon shrinking in the pot.

Truly yours,

TYRO.

Mason, Nov. 8th, 1851.

## TO THE CHILDREN.

OSHTENO, April, 1852.

Once more it is spring, and cold though it has been, the bright cheerful looking crocus has bloomed and passed away, as all that is bright and beautiful in this world must. The violets are peeping from among their green leaves, the willows are covered with their soft, downy catkins, little kitys as the children call them, the buds are swelling on the fruit trees, the Hyacinths, Tulips and Jonquils, are sending up their green leaves and flower stems, and soon every thing will look bright and beautiful. Do you little children ever think how very good God is, to make the earth so beautiful? He could have made the flowers all one color, or made them dark and unattractive, but instead of doing so, he has made them to bloom, in an endless variety of form and colour, and in lavish profusion, so that in the spring they are spread like a carpet for you to walk upon. Little readers, have you a garden of your own? If not, ask your father to give you a small piece of ground, and if you cannot do it yourself, ask some older member of your family to spare it up; if you have no flower seeds, or flowering plants, and are not strong enough to use a spade, and have no trowel take a large knife and basket, go into the fields and woods, and carefully dig up the wild flowers, taking care not to shake off the earth from the roots, and set them in your little garden. How pleasant it will be to see them blooming where you have put them; and will you not like to gather the flowers and place them beside your fathers or mothers plate, at table? As I am writing I can see a bed of wild flowers, that my own dear little boy, who is an angel now, helped his sister to transplant last spring. He seldom comes home from school or from a walk, without bringing "mother" a bunch of wild flowers; and now when I look upon them I always think of him. Would not you like to have your mother reminded of you, by such beautiful and innocent things as the sweet flowers?

If you can get the seeds of radishes, lettuce, cucumber and melons, plant them, it will be so pleasant, to be able to give your parents a nice radish, cucumber or melon from your own little garden. And now my young friends when you look about you, and see how good God is, to make every thing so beautiful to please the eye, and all the delicious fruits and vegetables, to please the taste, and promote our health, I hope you will never forget to be thankful to Him, for all the blessings you enjoy.

Your friend,

D. M. B.

## THE ADULTERATIONS OF TEA.

Amongst the recent investigations of the *Lancet*, relative to the adulteration of articles of consumption, the inquiry respecting tea is one of the greatest interest and importance, on account of the universal use of that delightful beverage. As far as our own dealers are concerned, the results obtained are not unsatisfactory, but the extent of deception practised in China is beyond what most persons are prepared to learn. The Chinese themselves not only use a vast number of injurious materials, but also other leaves than those of the tea plant—a system which has increased since the trade was thrown open and inspection of the East India Company ceased. In England some of the spurious manufactures consist of the leaves of the beach, elm, horse-chestnut, plane, fancy oak, willow, poplar, hawthorn, and aloes, the latter being most frequent on account of their astringent quality.

The use of re-dried tea-leaves however, has been the most general form of imposition here; and in 1843, when the process was interrupted by the vigilance of the Excise, it is supposed there were not less than eight manufacturing for the purpose in London alone, besides many in the provinces. The leaves were bought up at coffee-houses, at 2½d. per lb, mixed with a solution of gum, re-dried, and then colored with rose-pink and black-lead to "face" them, a bloom being also sometimes imparted with a vegetable red mixed with carbonate of lime. The practice still prevails to some extent, catechu being added for its tannin, but it is greatly limited by the proceedings of the Excise. Certain mixtures lately sold as "tea improvers," under the names of "La Veno Beno" and the "Chinese botanical powder," in packages for 3d. each, have been ascertained to consist of 76 per cent. of catechu, the habitual use of which is calculated to cause serious evils, while the rest is sumach leaves or wheat flour.

Out of 35 samples of black tea tested upon their arrival from China, 23 consisting of congous and souchongs, were genuine, while 12 which consisted of scented pekoe and scented caper, chulan, or black gunpowder, were adulterated. This adulteration consisted in the leaves having been faced, so as to improve the appearance of the teas, with black-lead, an iridescent powder resembling mica, indigo, and tumeric. Of one coarse sort, which contained fragments of rice or paddy glazed in the same manner as the tea leaves themselves, it is understood that 220 boxes were disposed of at public sale, on the 13th of June last. None of these samples, however, contained any other leaf than that of the tea plant. With the green tested on their importation the results were much more serious.

Thirty samples were tried, and all were found to have been adulterated. Five consisted of what is called "lie" tea, which is simply tea-dust and sand made up with rice water; one was composed of paddy husk and other substances, and one was a mixture of "lie" tea and spurious leaves of other plants. Every one of the 30 sorts was artificially glazed or colored. Prussian blue, indigo, tumeric powder, and China clay being the substances employed. A curious additional fact was likewise arrived at. In no instance, among all these trials, was a single leaf discovered possessed of a green color other than what was produced by artificial means, and an irresistible inference consequently arises that there is most probable no such thing as a genuine green tea of the color ordinarily supposed to be its characteristic. Two specimens from Assam were tried, and these were found genuine; but their color was of a yellowish dullness, with the slightest tinge of green. The same thing was noticed also in a specimen from Java, which was found genuine, except that it was slightly faced apparently with China clay. The system of fabrication seems to be general amongst the Chinese, and the spurious sorts have their regular market quotations. With regard to British operations of the same kind, the skill exercised is described as little inferior. In three specimens lately seized by the Excise, the materials variously employed were exhausted tea leaves, Prussian blue, tumeric, China clay, Chinese yellow, soapstone, indigo, catechu, and the leaves of the sycamore and horse-

chestnut. As respects the samples purchased in London shops, the facts are not more unfavorable than might have been expected from the Chinese adulterations, and the belief is warranted that amongst the venders themselves, the practice is not at present extensive. Out of 24 samples of black tea bought in the metropolis, 20, consisting of congous and souchongs, were all genuine, while four, which were of the scented descriptions, were adulterated; most probably, however, in China, without the knowledge of the dealers. The conclusion from all the facts is, that the great bulk of all the black tea used in this country, viz: congou and souchong, is genuine, and that the scented teas—the pekoes and capers—are invariably adulterated. Of green tea, out of twenty samples purchased in London, all were artificially colored, glazed or painted with a mixture of Prussian blue, tumeric powder and China clay. Eleven were also adulterated with "lie" tea, which, although it may have been introduced before importation, is still so easy of detection, and also so dangerous from the extent to which it is colored with Prussian blue, that the dealers are not justified by the plea of ignorance, in selling a mixture in which it is contained. It is moreover known to be sent over to this country in vast quantities, and disposed of at 6d per lb., so that there is reason to apprehend that it may not unfrequently be mixed on the spot.—*English Paper*.

**GREAT CHEESE FACTORY.**—George Hezlep's great cheese factory in Ohio, converts the milk of about 2500, belonging to farmers in the neighborhood, into the best cheese, by labor-saving machinery. The curd is made, sacked, and marked by the farmer, and sent to the factory by a wagon, which daily goes the rounds. Eight teams are thus employed. The curd is then weighed, sliced in a machine, then passed through the double curd-cooking apparatus, then through a machine which cuts it fine to a powder, and salts it while passing through. It is then pressed, sacked and again pressed. A machine sacks 245 cheeses per hour. The factory makes 300 cheeses daily, weighing about 5000 pounds. Nearly 400 tons are turned out yearly.—*Cultivator*.

**FRENCH MERINO SHEEP.**—S. P. Jewett, of Middlebury, Vt., has just imported from France 104 ewes and 4 rams, selected by himself, and are in good health and condition. His importations of last year and this, amount to nearly 600, at a cost of over \$50,000.

These importations will, no doubt, aid materially in improving our breeds of sheep. Some of his yearling rams are said to be very large, weighing over 200 lbs., and to produce fleeces weighing 20 to 30 lbs.! But it must be horrible dirty.

**THE BINGHAM SHEEP SHEARING.**—Mr. Bingham's sheep shearing came off on the 18th and 19th of May. There were five yearling ewes which sheared 18 lbs. each; one that sheared 19 lbs.; one 20 lbs.; one 21, and one buck 23 lbs. The lightest fleece weighed 13¼ lbs. The two years old did not come up to these weights. These fleeces were of course weighed in the dirt.

Several Black Hawk and Morgan horses, noted breeds, were brought out, and some Durham Cattle.

According to the writer's account, they had a very comfortable time.

## NEWAYGO CO.

A resident of this northern county of our State, writes as follows:

Our country is new here, but we have good land, good timber, good water, and every thing to make a country what it should be. Wheat looks fine; potatoes do well here—we are not afraid of the rot; our soil is a black sand, containing lime, and very dry.

Yours,

W. E. BONNEY.

For the Michigan Farmer.

## ANOTHER LETTER TO THE CHILDREN.

How many are entitled to a second letter from their new made friend? For your own sakes I will hope that very many little boys and girls can respond, "I am." Well, if I say to you that I have long loved children, you will not doubt me. I love to see them happy, cheerful and good, and with all this, which would be a great change for very many, I would have them agreeable companions for older and wiser persons. Now the question arises, perhaps, how can this be. Well, it is to answer this and such like questions, that I am writing these letters to you. Kindness is the first ingredient necessary to help to mend your manner and disposition. To receive instruction cheerfully from your parents and teachers, will do a great deal towards making you loveable. Then you can endeavor to be polite, and not willingly injure the feelings of any one—you can study to become wise—you can remember that it is necessary for you to be neat and nice about your dress—that you should never use bad language—that you should treat the aged with marked respect, and always your parents. All who feel interested in children would desire (if they should express their feelings) that they have fixed purposes—a why and wherefore for all their plans and actions. Learn to think, children, and never let a day pass without learning something.—Now there is not one reason why the little boys and girls of the farmers of Michigan should not be our wisest men and women. Many of you have not been in our villages and cities to spend much time, else you would very readily know why I tell you so. The boys especially, are in the streets after school hours, (and very many of them do not love their schools as they ought,) playing with marbles, and balls and kites. But that is not the greatest wrong; they learn bad, vulgar, immoral and profane language, which too often lives with them and ruins their whole life. This comes from bad associations. You children are free from this. Will you remember all your privileges, and study to become great and good?

JENNIE.

## BEAUTIFUL EXTRACT.

The following is from Irving's "Home Book of the Picturesque:"

And here let me say a word in favor of those vicissitudes of climate which are too often made the subject of exclusive repining. If they annoy us occasionally by changes from hot to cold, from wet to dry, they give us one of the most beautiful climates in the world. They give us the brilliant sunshine of the south of Europe with the fresh verdure of the north. They float our summer sky with clouds of gorgeous tints of fleecy whiteness, and send down cooling showers to refresh the panting earth and keep it green. Our seasons are all poetical; the phenomena of our heavens are full of sublimity and beauty. Winter with us has none of its proverbial gloom. It may have its howling winds, and chilling frosts, and whirling snow storm, but it has also its long intervals of cloudless sunshine, when the snow-clad earth gives redoubled brightness to the day; when at night the stars beam with intensest lustre, or the moon floods the whole landscape with her most limpid radiance; and then the joyous outbreak of our spring, bursting at once into leaf and blossom, redundant with vegetation, and vociferous with life!—and the splendors of our summer—its morning voluptuousness and its evening glory—its airy palaces of sun-gilt clouds piled up in a deep azure sky; and its gusts of tempest of almost tropical grandeur, when the forked lightning and the bellowing thunder volley from the battlements of heaven, shake the sultry atmosphere—and the sublime melancholy of our autumn, magnificent in its decay, withering down the pomp and pride of a woodland country, yet reflecting back from its yellow forests the golden serenity of the sky, surely we may say in our climate "the heavens declare the glory of God, and the firmament sheweth forth his handi-work; day unto day uttereth speech; and night unto night sheweth knowledge."

## INTELLECTUAL CULTURE.

While we deem it our duty to encourage the better cultivation of the farm, we may deem it also of the first importance, that the mind and the heart be not neglected. They need cultivation as much as the earth, and will yield as readily good fruits. Cultivate the intellect. Few instances can be found, of men who have struggled with difficulties in acquiring knowledge, and so must have acquired habits of industry, diligence, self-government, and self-denial, who have yet remained bad men. Such instances are rare. They may be distinguished scholars and men eminent in the sciences, and as statesmen, who are bad men; but we know not how much worse they would have been, but for their love of knowledge. Knowledge is directly power, and indirectly virtue; and is generally productive of happiness.

No man needs it more than the farmer. It is his duty and his interest to cultivate knowledge and a love of knowledge himself, and give to his sons and daughters the means of obtaining it. What amusement is so innocent, and at the same time so cheap, as a good book?—There are corrupting books—and the world is full of them—but generally speaking, they are less corrupting than idle and vicious companions; both should be avoided. Who ever knew a *young* man, idle himself and the companion of idlers, that was not ignorant, corrupting and conceited? And "who ever knew an *old* man towards the close of life, amid all his regrets, grieve at the time and efforts devoted to useful studies, feels knowledge a drag on the heaviness of old age, or would exchange it for anything but true virtue, or the pure joy of heaven."

—Vermont State Journal.

## LADIES' DEPARTMENT.

For the Michigan Farmer.

## FARMERS' WIVES AND HOME.

MY DEAR LADY FRIENDS:

In a congratulatory letter from our mutual friend, Mr. Betts, he suggested—"your letters henceforth will be addressed to Farmers' wives instead of daughters"—but I have so short a time borne that honorable name (Farmer's wife,) that I propose still to write letters by way of remembrance to the lady readers—at some future time I may be able from the "book of my own experience to select chapters of a readable character and not altogether unsuited to our relations—then you shall have them.

The pleasures and joys of home are crowding themselves into my view and I urge upon all to make to themselves such joys I shall but tell them of the only *paradise* on earth. I can conceive of no other permanent well-spring of happiness other than that of a family fire-side. We speak of journeyings giving us great pleasure—the sight-seeing, the greeting of friends; the meeting with bustle and jostle of hurried mankind giving us impetus and awakening our energies—but what real enjoyment does this give, if we are to return to a neglected spot, illy kept and not our own? surely not any, it would only serve to make us dissatisfied and disheartened. But we have homes—how are they kept?—are they home-like? It is not grandeur, nor show, nor costly furniture that makes them such, but neatness, prompt attention to duty, gentleness of manner, all add to the making up. Around a family fire-side where all its members study to make it a happy one, cluster joys unalloyed. I would wish that every farmer's home in Michigan was the centre of such happiness—that every lady loved the name of such a home more than dress or company, or outside show and display. Shall we study to make ours such? Let us then remember that intelligence and virtue, the love of the beautiful and good must be cultivated, to add permanency and strength to our best endeavors. I hope all feel an abiding interest in the "Farmer" as a monthly visitor. Can Mr. Betts tell what portion of all the farmers of Mich. receive it, any suggestion as to its wider circulation, I am sure will meet with due attention from its friends—and "they are they," who wish the good and improvement of all.

J \* \* \*

Oak Lodge, June, 1852.



## THE LOVE OF FLOWERS.

- "God might have made the earth bring forth"  
 "Enough for great and small"  
 "The oak-tree and the cedar-tree"  
 "Without a flower at all."
- "He might have made enough, enough"  
 "For every want of ours"  
 "For luxury, medicine, and toil"  
 "And yet have made no flowers —"
- "Our outward life requires them not—"  
 "Then wherefore have they birth?"  
 "To minister delight to man"  
 "To beautify the earth;"
- "To comfort man—to whisper hope,"  
 "When'er his faith is dim;"  
 "For whoso careth for the flowers"  
 "Will much more care for him."

Hewigar t.Mt.

These beautiful lines were vividly recalled by a visit to the first exhibition of the Detroit Horticultural Society, for the present season; and as I stood amid the choice collection of evidences of the Creator's love of the beautiful, the thought occurred to me that if every town in the State would have its Horticultural Society and three or four exhibitions in a season it would do vastly more for the mental and moral improvement of the inhabitants than all the *circuses* and *caravans* that ever took money out of the people's pockets. Human beings are so constituted that they must have recreation of some kind, and how delightful it would be to have that kind of recreation which would be both amusing and improving.

Let the families in any neighborhood, in any farming community, unite themselves together in a Horticultural and Agricultural Society, let the wives and daughters bring their choicest flowers, and the fathers and sons, the choicest specimens of their grain and their largest vegetables, and "from early hour till dewy eve" spend the time socially, and how much enjoyment they would efford themselves and at how cheap a rate!

Every neighborhood and village might easily do this; I know some have these amusements now, but how might they be multiplied! I do long to see the time when rational recreations shall be multiplied, and when "popular amusements" shall cease to be synonymous with popular vices.

Cannot some means be devised by which the ladies, especially those living in the country will become more interested in the cultivation of rare and beautiful flowers. How much pleasure, how many refined and elevated emotions must flow from the love and culture of these productions of a beauty-loving God. I have often thought that no one who loves flowers could become entirely vicious and that in proportion to the intensity of this love would be the moral elevation; this may not be strictly true, but there must be a greater or less degree of refinement and moral purity as the result of contemplating the beautiful, in nature or art; and no where is this so distinctly and perfectly seen as in a simple flower.

What would the spring time be without flowers? who would not miss those delicate fragile blossoms the sweet prelude of the coming summer?

Who that loves flowers has not felt the sentiment so beautifully expressed by Willis.

"There is to me  
 A daintiness about these early flowers  
 That touches me like poetry. They blow out  
 With such a simple loveliness, among  
 The common herbs of pasture, and they breathe  
 Their lives so unobtrusively, like hearts  
 Whose beatings are too gentle for the world."—

\* \* \*

## EDUCATIONAL DEPARTMENT.

We present our educational friends, this month with the following article from the *American Artisan*.

## RECENT OBSERVATIONS ON THE SUN.

The grand orb whose influences are so potent in our planetary system is, by the aids of modern science, slowly revealing more and more of its physical characteristics to mankind. Its attractive power and its quantity of matter have been discovered and ascertained. The velocity of its light has been determined. It has been found, like all the other bodies belonging to our system, to revolve upon its axis. But still more interesting are the results of the observations in connection with the transit of Venus across the sun's disk, for thereby we can calculate its distance from the earth, its real diameter and magnitude, the density of the matter of which it is composed, and the force with which heavy bodies fall toward its surface.

Who can tell where the bounds of man's knowledge of this glorious luminary shall be fixed.

The total eclipse of the sun, which occurred in northern latitudes in July last, was attentively observed by many of the most eminent astronomers, and new light was obtained in relation to the physical constitution both of the sun and of different stars. We have been interested by the discourse of M. Arago upon this subject, recently read before the French Academy, and annex some of his statements, in the hope that they will be no less gratifying to the readers of the *Artisan* than to ourselves.

In relation to the immense volume of the sun, figures are altogether insufficient to convey anything like an adequate idea, and we therefore accept gladly from the astronomer in question the following illustration of the subject. Imagining for a moment, that the centre of the sun corresponded to that of the earth, the surface of the sun, would not only reach the sphere in which the moon revolves, but but it would extend almost as far again: its volume being one million and four hundred thousand times that of the earth.

It is only since 1611 that much progress has been made in the inquiry as to the constitution of the sun.—Fabricius, a Dutch astronomer, then observed black spots on the eastern margin of the sun, which moved gradually towards the centre, passed it, reathed the western margin, and then disappeared for a certain number of days. Repeated observations of this kind have shown that the sun rotates on its axis once in twenty-five and a half days.

These black spots are surrounded with a radiance less luminous than that of the rest of the orb, and which has been named the *penumbra*, and this penumbra has led to a supposition which is at first view astonishing. This supposition is that the solar orb is a dark body, surrounded at a certain distance by an atmosphere, which may be compared to that enveloping the earth when composed of a continuous bed of opaque and reflecting clouds. The first atmosphere is supposed to be surrounded by another, *luminous in itself*, which has been called the *photo-sphere*. Spots in the Sun would then appear as often as there were found in two concentric atmospheres corresponding vacant portions, which would permit us to see the dark central body.

Although this hypothesis is very plausible, it has been assailed by high scientific authorities, and hence it was desirable to ascertain if possible by experiment, the nature of the luminous atmosphere of the Sun. and of late improvements in of Optics the problem, says Mr. Arago, has now been triumphantly solved, and the method by which this has been done, is briefly as follows.

It is ascertained that there are two kinds of light,—natural and polarized. A ray of the first exhibits the same properties upon all parts of its surface; whilst with regard to polarized light the properties exhibited on the different sides of its rays are different multitude of respects.



In looking directly at the sun with what is called a polarizing telescope, two white images of the same intensity and the same shade will be seen. Let us suppose the *reflected* image of this orb to be seen in water,—or in a glass mirror. In the act of reflection the rays become polarized. The lens no longer presenting two white and similar images; on the contrary, they are tinged with brilliant colors, their shape having experienced no alteration. If the one be red, the other will be green; if the one yellow, the other will be violet, the colors being complementary of each other, or susceptible by their mixture of forming white.

It must be observed that by whatever means polarized light is produced, the colors will display themselves on the polarizing telescope in the manner above described.

The polarizing telescope thus furnished the means of distinguishing between natural and polarized light.

Now it has been ascertained that the light emanating at a sufficiently acute angle from a *solid* or *liquid* body which is incandescent (meaning by that term a body ignited to a white heat,) presents evident marks of polarization so that in passing through the polarizing telescope, it is decomposed into two colored pencils.

The light emanating from an inflamed gaseous substance, like our common illuminating gas is always in its natural state, and shows no marks of polarization.

Thus by means of the polarizing telescope we can ascertain whether the substance which renders the sun visible is solid, liquid or gaseous.

The rapid changes of the spots, show that the substance is not solid. Observations of that substance with the aid of the most powerful polarizing telescope exhibit in this luminous substance no trace of polarization.

It then follows that the luminous atmosphere or photosphere of the sun is *gaseous*. And this conclusion may be generalized, since through the agency of rotation, the different points of the surface of the sun came in succession to form the circumference. Thus the theory above indicated, is found to be correct.

#### NEW EXERCISE IN SCHOOLS.

"We are much pleased with a novel school exercise, which has been tried in one of our public schools with great success, and has proved both interesting and profitable to the pupils. For the benefit of instructors, we give the plan adopted; assuring them that a trial will convince them of its interest and utility.

To each pupil in the most advanced class in school let a country be assigned; to one, we will suppose England; to another, Germany; to another, Russia. Let all the most important countries be assigned, and if the class is not large enough, let a pupil have two or three countries as his portion. Then request each of the pupils who has received an assignment to prepare a digest of every matter of interest which occurs in his or her country, said digest to be presented before the school at some time which may be selected.

We will suppose there is a class of twenty pupils.—To each pupil is assigned some division of the world, of which he is to give all the news that may come to hand. Suppose every other Saturday, an hour be spent in the exercise. The whole school may be allowed to participate. The pupil to whom is assigned England, is called upon to report. He gives an account of the closing of the Crystal palace, the reception of Kossuth, or some other matter of interest which can easily be gleaned from the digest of news brought every week by the steamship. Let another pupil representing Massachusetts, now rise and inform the school of the result of the gubernatorial election. And so let the whole globe be transversed.

We are certain that the exercise will prove advantageous. It will give scholars information which will be of great benefit to them. There is nothing so important at present as to keep the young well posted in current events of the day. The facilities for obtaining information are now so great that there will be no difficulty in obtaining sufficient materials. The journals

of the day will be read by the young with a far different spirit from that which now actuates them. Instead of stories and anecdotes, they will seek those departments of intelligence which are highly important, but too often neglected.

The same plan might be extended with profit. Let similar divisions be made with regard to the sciences. Assign to one pupil astronomy; another, geology; and another, the mechanical arts; and let occasionally an hour be spent in hearing reports as to advancements which have been effected, the new inventions which have been made. We can assure teachers that they will be surprised to witness the alacrity and interest with which the pupils will study subjects generally considered dull and prosaic.—*Boston Traveller*.

#### TEMPERATURE OF THE ARCTIC REGIONS.

DR. KANE has given, since his return from the Arctic expedition in search of Sir John Franklin, several lectures, before the Smithsonian Institution at Washington in one of which he thus describes the temperature of those regions of ice:—

At the appalling temperature of 40 and 50, or 70 to 80 degrees below the freezing point, cold became as sensible in its effects as heat; indeed, between the positive of very high, and the negative of the very low scale, it was impossible to distinguish by sensation. Upon going out into the open air, the face became encrusted with an icy rind, and the lips were glued together by the cementing aid of the beard and moustache. The trigger of a gun blistered the finger, and a jack-knife in the pantaloons pocket caused you to jump as with a sudden scald. During the long darkness, when they attempted to beguile the winter hours with theatricals, an unfortunate Thespian dropped the pantomimic flat-iron, as though receiving a sudden burn. Indeed, next day a row of blisters had given evidence of the truth that in temperature, as in every thing else, extremes meet.

Iceicles hung round the deck, peaches became a mass of calcedony, butter was cut with a chisel, beef with pick-axe and crowbar. Walking out, you are conscious of a bracing atmosphere. Whiskers and face are glazed with ice. Put out your tongue and it is frozen to your chin. Walking on, you get into a fine glow, often into a perspiration; but if the wind rises, then you have a fine sensation of pricking pins. Extremes of heat and cold are alike. In our new life, cold gave a positive character to our existence almost impossible to describe. We protected ourselves from metals with fur and buckskin. The crawl, the chill, which is with us at home, the indication of varying temperature, was there unknown. In fact, it was only by the direct attack of cold that we were aware of it, and officers and men agreed that we had suffered more at home from the cold. With such an inveterate enemy, however, we could not hope to escape scars, but we all returned alive. On one occasion, a poor fellow recovering from the inflammation of the lungs, being asked how his frost-bitten ear came on, produced it in a piece of paper, and said, "Doctor, I didn't want to trouble you, but it dropped off last night."

#### NEW AGRICULTURAL WAREHOUSE.

MR. C. L. Bristol has commenced the sale of agricultural tools, on Woodward Avenue, between the church and Jefferson Avenue; his place is known as the "Farmers' Store." (See advertisement.) He has just commenced and has not now a full supply, but intends to increase his stock largely soon. We are glad to see the increase of the trade in agricultural implements; it shows that there is a growing demand for them among farmers, which demand is a consequence of their prosperity, and we are certain that an increased prosperity will follow the general introduction of good implements. We hope our farmers will give friend Bristol a call.

## NEW AGRICULTURAL PAPERS.

The "Jefferson Farmer," a weekly, devoted in part to agriculture, and published at Sackett's Harbor.

The "Green Mountain Cultivator." We have received the first No. of this work, which looks promising, and is filled with useful matter. Success to it. Vermont is old enough to have an agricultural paper of its own. Published at Middlebury, at \$1.00 a year.

New ERA.—This is the title of a new paper published at Goldsboro, N. C. We like its appearance much; full of spirit and activity, we trust it will do good work among the farmers and planters of the country.

## BOOK NOTICES.

**THE FRUIT CULTURIST.** A new edition of this standard work has just been published. An addition of 40 pages of new matter has been made to it, with many other improvements. It is work of decided merit and we do not hesitate to recommend it to our friends.

**SAXTONS RURAL HAND BOOKS.** We have received two more vols. of this series of works by Saxton, who is really becoming quite an agricultural book publisher. One is entitled *The Cow*, and gives an account of the different breeds of fine Cattle, rearing and fattening stock, treatment of dairy cows and management of dairies &c., the other is entitled the *PESTS OF THE FARM*, alluding to different quadrupeds, predatory birds, insects &c., Sold at 25cts and are well worth double the price.

**THE CALORIC STEAMSHIP "ERICSSON."**—A ship is now being built at Williamsburg, N. Y., which is to use air as a propelling power. Its effect is produced by the condensation and expansion of the fluid, and the proprietors have not the least doubt of the success of the novel enterprise. The engine was invented and put in operation by Capt. Ericsson. The ship is to be launched the first of Sept., when her engine will be at once put aboard and the experiment tested.

RECEIPTS FOR THE MICHIGAN FARMER  
FROM MAY 25TH TO JUNE 25TH.

W W Tompkins APM 1, J V DeRuy 75c; D Williams PM 75c, E Smith 1, B R Carpenter \$4, J R Haynes PM \$8.50, J Winters PM 2, H Newman 75c, E P Barlow 1, E Warner, W Hartough 75c, J G Part 1, R L Farnsworth 1, A Richards 75c, J Redway 1, C H Coggeshue APM 1, W M Warden 1.80, A U Sutton 75c, J Churchill 1, J R Haynes PM 1, J Rider PM 1, D Felt 1, O F Buell 1, T M Norris 1, W Root PM \$3, A Mather 2, H H Allen 1, A Rider 1, A J Goddard PM 2, H R Pratt APM 50c, A Wood 1, E J Knowlton 75c, Col T Mosely 1, A B Haddell 2, D Hogan 1, J Gale 1, M Shoemaker \$4, R McClatchy 1, C W Caultkins PM 1, W A Richmond 1, E Derby 1, W A Brent 1, R R Fulkerson 1, G Patterson APM 1, J Wilsey 1.75, C Gregory APM 1, R Pemberton 1, H Hoffman 1, C Van Curen 1, J W Peine 1, J Anscombe 1, H Wing 1, W Bishup \$4, M Donnelly 1, A Prentice 1, D Hicks 1, F S Shattuck 1.50, M C Benham 1, A Reynolds 1, D Ellis 1, R C Runney 1, W S Higley 1.75, W E Bonney 1.25, N H Gookrich 1, C Kingsley 1, H R Pratt APM 1.50, W Brington 2, L S Hoxie 2, J Miller 1, A A Copeland agt 1, J Stringer 1, A Shynton 1, G Sellman 1, J A Sheldon \$4, H W Horton 1.50, G B Murray 1, D Woodruff 1, B B Chapin agt 2, E W Hewitt 1, L Blackmar 1, A Merrill 1, J Brown 3, A M Dougal 2, Geo Orr \$3, H Kelsey PM 2, W H Burley 1, A Allen APM \$4, D S Bentley agt 1.

## DETROIT PRICES CURRENT.

Herd's Grass... \$ bu. \$2.50@3.00	Salt... bbl 1.31
Flax... \$ 1.00	Butter... do 30
Lime... \$ bbl 75	Hides... do 10@12
Flour... \$ 3.37 1/2	Wheat... bu 8 1/2
Onion... \$ bu 43	Wheat... bu 7 1/2
Oats... \$ 32	Hams... 10
Rye... 40	Onions... 75@1.00
Harley... 62@75	Cranberries... 2.50
Hogs... 1.00 bu. 4.50 5.00	Buckwheat... \$ 100 bu 1 1/2
Apples... \$ bu.	Indian meal... 1.00
Potatoes... 1.00	Beef... 3.00@4.00
Hay... ton 7.00 9.00	Lard... \$ lb (retail) 10
Wool... 18@40	Honey... 12
Peas... bu 10@2.00	Apples, dried... bu 1.75@2.00
Beans... 2.00	Peas... 3.00
Beef... bbl 8@8.50	Clover seed... 6.00
Pork, mess... @1.10	Pine lumber, clear, 20'00 @ Mfr
White Fish... 50	" 2d 15.00 "
Trout... 7.50	Bit lumber... 11.00 "
Codfish... 5	Flooring... 12.00
Cheese... 6 1/2 @ 8	Common... 30.00
Wood... cord 2.00@2.50	Lath... 2.00

## INDEX VOL. 3—No. 1.

Editorial Correspondence—Manures...	193-5
Farmers, why don't you Write?—Crops in Jackson Co.—Cure for Rattle Snake Bite—Seed Corn, Sorrel, Short-Cake Pie, Farmer's Clubs—Dead Animals for Manure, &c., Manure, (continued)—Basket Willow...	196
California, the Season and Crops...	198
Principles of Breeding...	199
Seed Drill—Circular, Nat. Agricultural Convention—Leicester Sheep—Poultry...	200
Wanted, a Farm School—Rural Architecture...	201
Curing Beef in Texs—Fine Stock—Weeds...	202
Beauty and Utility...	203
Pearson Quince Stocks...	204
Horticultural Exhibition—American Pomological Congress—Budding—Cincinnati Horticultural Society...	206
Summer Treatment of Grapes—Improvement of Old Pear Trees—Cranberries, an Inquiry—Rose Insects—To keep Bugs from Vines...	207
Hay Making...	208
Shade Trees—Mich. Farmer vs. President Making...	209
Two Pictures of a Farmer's Home—A New Department...	210
The way to Fortune—Views respecting the Source of Light—Sowing Corn for Fodder—Wool...	211
Fisheries of Michigan—Importance of Agriculture...	212
To Correspondents, Haying—Acknowledging the Corn...	213
Agri'l Ode—Silk Manufacture—Rattle Snake Bite or Plants...	214
Swine—No. of Plants to an Acre—Blind Teeth in Horses—Prevent Pitting by Small Pox...	215
Wool Market—Shop and Tools—Fowls—Cabbages...	216
The Science of Meat—To the Children...	217
Adulterations of Tea—Great Cheese Factory—Newygo Co...	218
Another Letter to the Children—Beautiful Extract—Intellectual Culture—Farmer's Wives and Home...	219
Love of Flowers—Observations on the Sun...	220
New Exercise in Schools—Temperature of the Arctic Regions—Agri'l Warehouse...	221
New Agri'l Papers—Book Notices—Receipts—Prices Current...	222

WELLS, FARGO & COMPANY'S  
CALIFORNIA EXPRESS.

A JOINT STOCK COMPANY.....CAPITAL \$300,000  
Office No. 16 Wall Street, NEW YORK.

THIS Company, having completed its organization as above, is now ready to undertake a general Express Forwarding, Agency and Commission Business; the purchase and sale of Gold Dust, Bullion and Bills of Exchange; the payment and collection of Notes, Bills and Accounts; the forwarding of Gold Dust, Bullion and Specie—also, Packages, Parcels and Freight of all descriptions, in and between the city of New York and the city of San Francisco, and the principal cities and towns in California; connecting at New York with the lines of Wells, Butterfield & Co., and Livingston, Fargo & Co., forming the American Express Company; also with the Harnden Express, Pville, Virgil & Co.'s Northern and Canada Express, Davenport & Mason's New Bedford Express, and Livingston, Wells & Co.'s European Express.

They have established Offices, and faithful Agents, in all the principal cities and towns throughout the Eastern, Middle and Western States and California; energetic and faithful Messengers, furnished with iron chests for the security of treasure, and other valuable packages, accompanying each Express upon all their lines, as well in California as in the Atlantic States.

Our several Agents in California are authorized to draw drafts on us, payable at the principal offices of the American Express Company, between New York and St. Louis, according to persons in California, the most convenient, prompt and reliable means of remitting to their friends in this country. Also, Drafts on California, for sale at the current rates of exchange.

SAMUEL P. CARTER, for many years connected with the American Express Company at Albany, and R. W. WASHBURN, late of the Bank of Syracuse, have been appointed principal Agents in California.

The Agents of the American Express Co., are authorized to act as Agents for this Company.

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## AUSTRALIAN WHEAT. VERY SUPERIOR.

THE berry of this grain is extra large, and makes the best of flour. It produces a greater average crop than any other variety now grown in New-York. Several years experience in its cultivation, proves that it is less liable to rust or mildew than other kinds; and as the stalk is large and strong, it is also less liable to blow down or lodge. PRICE \$1 per bushel. Other varieties of wheat, such as the White Flint, Mediterranean, Black Sea, &c.

A. B. ALLEN & CO.,

N. Y. Agricultural Warehouse, 189 and 191 Water street,  
NEW-YORK.

July, 1852.

ly2m

## DURHAM BULL. THE CELEBRATED SHORT HORN DURHAM BULL GUELPH.

FIVE YEARS OLD; bred by HENRY PARSONS, Esq., Canada West, now the Property of ISAAC ASKEW, of Amherstburg, will stand for Cows at the Farm of Francis Baby, Esq., of Windsor, C. W., on the following terms, viz:

FIVE DOLLARS PER COW,

And every attention will be given to Cows sent from City of Detroit, Michigan; Chatham, and other places at a distance. Good pasturage provided free of charge. Those who wish to secure the services of this Bull for Cows will please make an early application.

—PEDIGREE—

The GUELPH, got by the Short Horn Durham Bull Fergus, bred by Hon. C. Adam Ferguson, Wood Hill, Waterdown, Canada West, Fergus was got by Bull Wellington, imported by Charles Vail, Esq., of Troy, New-York State. Guelph's Dam, Red Rose, red and white, bred by Charles M. Giddings, Cleveland, Ohio; calved in May, 1843; got by Barry out of Cinderella, by Cleero; Young Flora by Calebs. Flora was bred by Mr. Mason, of Chilton, Durham, England

GUELPH took the first prize at the Gore District Show, when one year old; at two years old, he took the first prize at the Amherstburg Fair Show; he also competed at the Michigan State Fair, at Ann Arbor, 1850, and took the Diploma on Foreign Stock; he also took the first prize and diploma at Michigan State Fair in Detroit, in 1851, against the New-York State Stock.

July 1, 1852

3m

## GREAT SALE OF BLOOD CATTLE.

ON WEDNESDAY, THE 18TH DAY OF AUGUST NEXT,

I WILL sell the chief part of my large herd of Blood Cattle,—Cows, Heifers, and heifer and bull Calves—comprising upwards of fifty full-bred Short-Horns.

Also, eight thorough-bred Herefords—a two years old bull, a yearling bull, three cows and three calves. One of the Hereford cows, ("Rarity") was imported from England by Messrs. Corning & Solomon, in 1841. The others, excepting the two years old bull, are her descendants, by bulls of the same stock.

Also, two or three Devon bull calves, got by Mr. Ambrose Stevens' imported bull "Caucus," bred by the distinguished Mr. Quarley, of Devonshire, England, and out of cows descended from the herd of the late Earl of Leicester.

The remainder of the cows and calves, forty or fifty in number, are high-bred Short-Horn grades, with a dash of Devon blood in some of them.

The calves of thorough-bred Short-Horn and grade cows, are mostly got by the imported Short-Horn bull "Duke of Exeter," (10,152,) of the celebrated "Princess tribe," bred by Mr. John Stephenson, of Durham, England, whose herd is excelled by none, if equalled, by any now in England.

All the Short-Horn and grade cows and heifers which come in season, will be bulled previous to the sale, by the "Duke of Exeter."

Many of the cows, both thorough-bred and grade, are descended from the Bates bulls "Duke of Wellington," imported by George Vail, Esq., of Troy, N. Y.; and by "Symmetry," son of "Wellington," out of Mr. Vail's imported Bates cow "Duchess."

This stock has been bred with a strict regard to their milking quality, in which they have been fully proved, and are not excelled by any herd of cows in the United States. They are all gentle, with fine silky udders, milk easy, and are animals that will be satisfactory to any one in want of the best breeding and milking stock.

The sale will take place at the residence of Peter Gunbrance, two miles above Albany, on the Troy road, on the homestead farm of Gen. Van Rensselaer, where the cattle will be for a week before the sale.

Catalogues with pedigrees will be prepared by the 15th of June, and sent by mail to all postpaid applicants.

I will also sell at the same time, two pairs of six years old thorough-bred Short-Horn oxen, and two or three pairs of matched steers.

Also, ten or twelve South-Down buck lambs, got by an imported ram, from the unrivaled flock of Jonas Webb, of Bahabram, England, and from Ewes descended from the flocks of Mr. Webb, and Mr. Ellman of Sussex.

LEWIS F. ALLEN.

Black Rock, N. Y., May, 1852.

ly2m

## TO FARMERS! A RARE CHANCE

IS now offered to a farmer wishing to locate near Detroit, which furnishes one of

### THE BEST MARKETS IN THE WORLD!

The proprietor being obliged to leave the Western climate, on account of ill-health, offers this farm on very advantageous terms; it contains 327 ACRES, and is so situated as may be divided into two or three farms, if desired, and will be sold either separately or together, as may be preferred. About 100 acres under improvement, two orchards, one very fine grafted, about bearing, and comprising several hundred trees. A fine Peach orchard of about two hundred trees, about bearing the New York rare-ripe Peach, and last, but not least, a fine bearing Chestnut orchard, such as cannot be found in the State.

This farm joins Dearborn Village on the east, and the Monroe road on the south, the Rulo road on the West, and the Detroit and Saline Plank-road on the north, being but twenty minutes on the cars from Detroit, and the first stopping place from that city, and about ten miles by plank road. The advantage by cars to Detroit renders this Farm the most desirable one in the county for furnishing milk for the city. A fortune may be made in this business on this Farm, and again the Wood on the place may be made to pay for the entire farm, if being only about 50 or 100 rods from the Central Railroad Wood Depot, where from 3 to 4000 cords may be sold for cash in hand every winter, bringing the past winter \$1.25 per cord, and must increase in price from year to year.

BUILDINGS consists of frame barn about 30 by 40, frame shed about 20 by 50, log house and frame milk house, and building material on the ground nearly sufficient for a house 28 by 35 feet.

TERMS for this place, are ten per cent. of the purchase money (only) down, the annual payments of ten per cent. each, with interest, being nine years pay day.

This farm is put at the low price of twenty dollars per acre, and on exceedingly desirable terms, and is believed that there cannot now be purchased between this farm and Detroit a single farm for less than from forty to two hundred dollars an acre, and that the day is not far distant that this farm will not be sold for less than one hundred dollars per acre.

Inquire of

W. S. DRIGGS, Detroit,

Corner of Griswold street and Jefferson Avenue, Up State.  
June, 1852. lytf

## THE NAPOLEON DYNASTY, HISTORY OF THE BONAPARTE FAMILY BY THE BERKELEY MEN.

THIS work is now in press, in one handsome octavo volume of about 500 pages. The work is prepared by several literary men of ability and taste, and embellished by 18 fine portraits of the Bonapartes. It embraces a full, brilliant and authentic history of the Life of LOUIS NAPOLEON, Prince President.

CORNISH, LAMPOR & CO.,

ly PUBLISHERS, 8 Park Place, New York.

## PAULER BUCKS.

THE subscriber has a number of very fine Escorial and Pauler Bucks Lambs, which he will sell next fall, at about four dollars per head.

FARMERS wishing to procure good Sheep, can see them at Mount Pleasant Farm, one and a half miles east of Ann Arbor.

ly R. B. GLAZIER.

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J. J. OAKLEY.

M. P. STEWART.

## PAPER WAREHOUSE.

THE UNDERSIGNED has opened an extensive Paper Warehouse on Jefferson avenue, Detroit, for the exclusive sale of all kinds of paper, where a general assortment can be found at all times. The attention of country dealers is respectfully solicited before purchasing elsewhere. Cash paid for rags. J. CLARK, Detroit, Feb. 19, 1851.



## HELP FOR FARMERS.

**THE** Subscriber is exclusive agent in the State of Michigan for the sale of McCormick's Reaping and Mowing Machines. The high commendation this Reaper has received in this country and in Europe, is a sufficient guarantee of its superiority over all others. Farmers wishing to purchase will do well to send in orders soon, as the number manufactured will in all probability fall far short of the demand.

Price of the Reaper invariably \$120, and the Mower attached \$20 additional. Terms of pay liberal, and the Machines warranted.—All orders must be addressed to the subscriber at Tecumseh, Leavice Co. Isaac Adams is the only Traveling Agent in the State.

May 1st 1852.

P. R. ADAMS.

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March 9, 1851.

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Insures only in the States of New York, Pennsylvania, Ohio and Michigan. E. S. STICKNEY,

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## ARMSTRONG'S HAT AND CAP EMPORIUM,

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**DEALER IN** Hats, Caps, Furs, Robes, Umbrellas, Canes, Gloves, Scarfs, Cravats, Suspenders, Buckskin Gloves, &c., very cheap for cash.

Would respectfully solicit the patronage of Farmers and others coming into the city, pledging himself to sell as cheap as any other establishment west of New York.

His stock of Hats and Caps are of his own manufacture and warranted the best.

Orders for any style of Hat or Cap promptly attended to. Regalins and Jewels of the different orders constantly on hand.

## SUTTON'S Patent Ventilating Smut Machine.

Also, Mot's Agricultural Furnace, for sale by  
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D. O. & W. S. PENFIELD.

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**A LARGE** and increasing variety constantly on hand, at Manufacturers' prices, adding transportation, among which are the following:

Starbuck's Premium Plows, 8 sizes, \$1 to \$18 00  
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Emery & Co's Improved Railroad Horse Powers and Overshot Threshing Machines and Separators, one horse \$145 00, two horse \$170 00.

Wheeler's do. \$140 to \$165.

Smith's New Improved Ventilating Smut Machine and Buckwheat Sifter, \$40 to \$200.

Straw Cutters from \$6 to 17. Corn Shellers from \$8 to \$20. Emery's Corn Planter, and Seed Drill, \$15. Vegetable Cutters, \$13.—Folding Harrows, 8 to \$20. Corn and Wheat Cultivators, 5 to \$9. Fanning Mills; Cast iron Dirt Scrapers, 4 to \$7. Grindstones with rollers, 2 to \$10. Churns, 1 50 to \$6. Agricultural Furnaces 10 to \$30. Cheese Presses; Hydraulic Rams, 10 to \$20. Wheel-barrows 4 to \$6. Well and Cistern Pumps, 3 to \$30. Wheat Drills, Bush-hooks and Scythes, \$1 50. Bog Hoes \$2; pruning knives, \$2; pruning saw and chisels, \$2; Post Spoons \$1. Screw wrench 1 50 to \$5. Trucks, &c., 3 to \$10.

Also, Hay, Straw and Dung Forks, Potato Hooks, Hoes, Shovels, Spades, Grain Cradles, Scythes, Rakes, Hay knives, Chains, Plows, &c. all for sale cheap for cash. D. O. & W. S. PENFIELD, jan 87 Woodward avenue.

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French, Belgian, English and American Cloths, Cassimeres and trimmings, Serges, Satins and Vestings, making the best assorted stock of these goods to be found West of Buffalo; for sale wholesale or made to order, at their

## CUSTOM DEPARTMENT.

where every satisfaction is to fit, style, &c., is warranted, and at reasonable prices. EAGLE & ELLIOTT,

61 Woodward avenue, nearly opposite the Presbyterian Church, Detroit. jan

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**A FEW COPIES** of the 6th, 7th, and 8th volumes of the Michigan Farmer, pamphlet bound and in boards, for sale at the book store of C. MORSE & SON. martf  
Detroit, Feb. 1st, 1851.

**TERM.**—THE MICHIGAN FARMER is published monthly, at Detroit, Michigan, for one dollar a year, in advance; after three months, \$1 25; after six months, \$1 50; after nine months, \$1 75. No subscription taken for less than one year, nor discontinued till all arrearages are paid. To clubs, five copies for four dollars, twelve copies for nine dollars, and any greater number at the same rate.

Advertising, for one folio, or one hundred words, first insertion one dollar and fifty cents—twelve dollars per annum.

Office next door to Markhams Book Store, opposite Major's Exchange—entrance same as that Daily Advertiser